

# CITY OF BALTIMORE



## COMMUNITY HEALTH NEEDS ASSESSMENT

2023-2024



## ACKNOWLEDGEMENTS

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This Community Health Needs Assessment (CHNA) represents the culmination of work completed by multiple individuals and groups. The Baltimore City Health Department (BCHD) and local health systems including Ascension St. Agnes (ASA), Johns Hopkins Health System (JHHS), Mercy Medical Center, MedStar Health, Mt. Washington Pediatric Hospital (MWPB), Grace Medical Center and Sinai and Leivindale Hospitals of LifeBridge Health, and University of Maryland Medical Center (UMMC) have served an integral role in making this comprehensive assessment possible. This group, the Collaborative, would like to extend its gratitude to focus groups participants, key community health leaders, and community members who provided information used to develop this assessment.

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Ascendent Healthcare Advisors served as consultants, directing the CHNA process and developing the content of this report.

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## EXECUTIVE SUMMARY

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A Community Health Needs Assessment (CHNA) helps health leaders evaluate the health and wellness of the community they serve and identify gaps and challenges that should be addressed through new programs, services and policy changes. This report was created in compliance with the Public Health Accreditation Board's Standards & Measures for Initial Accreditation, Version 2022, as well as Internal Revenue Service requirements for not-for-profit hospitals.

Several local health organizations came together as the CHNA Collaborative to help develop this CHNA, including:

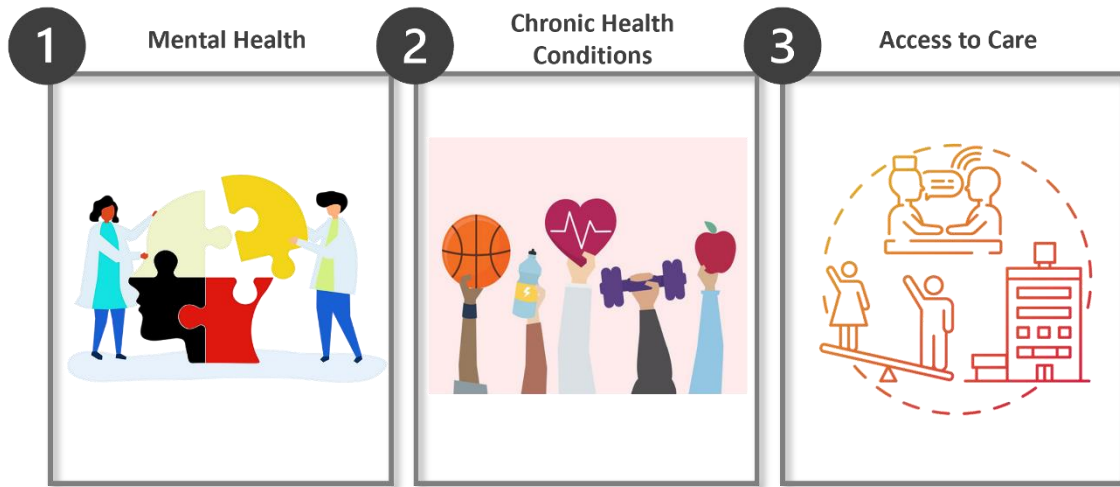
- Ascension St. Agnes Hospital
- Baltimore City Health Department
- Johns Hopkins Health System
- Lifebridge Health
- Medstar Health
- Mercy Medical Center
- Mt. Washington Pediatric Hospital
- University of Maryland Medical Center

Secondary (existing) data is an important piece of the CHNA process. More than 100 data indicators were chosen for analysis from data sources like the Robert Wood Johnson Foundation County Health Rankings, the University of North Carolina Health Literacy Data Map, and the Centers for Disease Control and Prevention. Secondary data measures were gathered into six categories and 20 detailed sub-categories based on common themes. Each data measure was also compared to state or national benchmarks to identify areas of specific concern for Baltimore City. Top community needs identified through secondary data analysis included social determinants of health, access to healthcare, mental or behavioral health, and health equity.

Primary (new) data were collected through community-based focus groups and web-based surveys for community members and key community leaders and included feedback from more than 2,600 people who live, work or receive healthcare in Baltimore City. Key leaders most frequently represented nonprofit organizations, but participants also included government, health, and faith leaders among others. A total of 33 focus groups were conducted, either virtually or in person, with a variety of community members from different backgrounds, age groups and life experiences. Primary data identified behavioral health conditions, access to healthcare, food insecurity, housing, and transportation among the top needs that impact the health and well-being of people living in Baltimore City.

The CHNA Collaborative worked together to identify the priorities city health leaders should focus on over the following three-year period. Leaders evaluated the primary and secondary data collected throughout the process to identify needs based on the size and scope, severity, ability for hospitals or health departments to make an impact, associated health disparities, and importance to the community. Although it was not possible for every single area of potential need to be identified as a priority, the CHNA

Collaborative selected three top priority health needs (mental health, chronic health conditions and access to care), which are shown here in no particular order:



The Collaborative also compiled a Health Resources Inventory, which provides links to resources available to help Baltimore City residents meet their health and social needs.

Following completion of this report, health leaders throughout Baltimore City will use its findings to collaborate with community organizations and local residents to develop effective health strategies, new implementation plans and interventions, and action plans to improve the communities they serve.

## INTRODUCTION

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### Background

To illustrate its commitment to the health and well-being of the community, the Baltimore City CHNA Collaborative has completed this assessment to understand and document the greatest health needs currently faced by its residents. The Collaborative includes representation from Ascension St. Agnes (ASA), Baltimore City Health Department (BCHD), Johns Hopkins Health System (JHHS) including Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center (JHBMC), LifeBridge Health's Sinai Hospital/Grace Medical Center and Levindale Hospital, Mercy Medical Center (Mercy), MedStar Health (MedStar),<sup>1</sup> Mt. Washington Pediatric Hospital (MWPH), and University of Maryland Medical Center (UMMC). These organizations helped gather the focus group and survey data that are detailed in this report. The CHNA process helps local leaders continuously evaluate how best to improve and promote the health of the community. The CHNA builds upon formal collaborations between the Collaborative and other community partners to proactively identify and respond to the needs of Baltimore City residents.

This report was created in compliance with the Public Health Accreditation Board's (PHAB) Standards & Measures for Initial Accreditation, Version 2022. The Standards "provide requirements and guidance for public health departments"<sup>2</sup> and help ensure public health departments align their standards with the CDC's "10 Essential Public Health Services," which are outlined in Figure 1.1 below. In its demonstration of data and prioritization of the City of Baltimore's community needs, this report aligns with all PHAB Standards and Measures for Initial Accreditation, including the need to:

- Conduct and disseminate assessments focused on population health status and public health issues facing the community;
- Participate in or conduct a collaborative process resulting in a comprehensive community health assessment;
- Collect and maintain reliable, comparable, and valid data that provide information on conditions of public health importance and on the health status of the population;
- Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health;
- Describe disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges; and
- Provide and use the results of health data analysis to develop recommendations regarding public health policy, processes, programs, or interventions.

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<sup>1</sup> MedStar operates three hospitals within Baltimore City limits: MedStar Good Samaritan Hospital, MedStar Union Memorial Hospital, and MedStar Harbor Hospital.

<sup>2</sup> Source: *Standards & Measures for Initial Accreditation*. (2022). Public Health Accreditation Board, Centers for Disease Control and Prevention. Retrieved September 27, 2022, from <https://phaboard.org/wp-content/uploads/Standards-Measures-Initial-Accreditation-Version-2022.pdf>.

Figure 1.1: The 10 Essential Public Health Services



Further, this process complies with Internal Revenue Service (IRS) requirements for not-for-profit hospitals to complete a CHNA every three years and to adopt an implementation strategy to meet CHNA-identified community health needs.<sup>3</sup> Specifically, the IRS requires that hospital facilities do the following:

- Define the community it serves;
- Assess the health needs of that community;
- Through the assessment process, take into account input received from people who represent the community's broad interests, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is reviewed and adopted by the hospital facility's authorizing body; and
- Make the CHNA widely available to the public.

<sup>3</sup> Source: *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501<sup>(c)</sup>(3)* (2023). Internal Revenue Service. Retrieved February 13<sup>th</sup>, 2024 from <https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>.

## **Process Overview**

A significant amount of information has been reviewed during this planning process, and the Collaborative has been careful to ensure that a variety of sources were used to deliver a truly comprehensive report. Both existing (secondary) data and new (primary) data were collected directly from the community throughout this process. It is also important to note that, although unique to the City of Baltimore, the sources and methodologies used to develop this report comply with the current PHAB and IRS requirements for health departments and not-for-profit hospital organizations.

The purpose of this study is to better understand, quantify, and articulate the health needs of Baltimore City residents. Key objectives of this CHNA include:

- Identify the health needs of Baltimore City residents.
- Identify disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges.
- Understand the challenges residents face when trying to maintain and/or improve their health.
- Understand where underserved populations turn for services needed to maintain and/or improve their health.
- Understand what is needed to help residents maintain and/or improve their health.
- Prioritize the needs of the community and clarify/focus on the highest priorities.

There are ten phases in the CHNA process, as described in figure 1.2 below. Results of the first seven phases are discussed throughout this assessment and the development of community health action plans and subsequent phases will take place after the completion of the CHNA report.

**Figure 1.2: The CHNA Process**



## Report Structure

The outline below provides detailed information about each section of the report.

- 1) [\*Methodology\*](#) – The methodology chapter provides an overall summary of how the priority health need areas were selected as well as how information was collected and incorporated into the development of this CHNA, including study limitations.
- 2) [\*City Profile\*](#) – This chapter details the demographic (such as age, gender, and race) and socioeconomic data of Baltimore City residents.
- 3) [\*Priority Need Areas\*](#) – This chapter describes each identified priority health need area for the City of Baltimore and summarizes the new and existing data that support these prioritizations. This chapter also describes the impact of health disparities among various sub-groups in Baltimore City.
- 4) [\*Health Resource Inventory\*](#) – This chapter documents existing health resources currently available to the Baltimore City community.

- 5) [Next Steps](#) – This chapter briefly summarizes the next steps that will occur to address the priority health need areas discussed throughout this document.

In addition, the appendices discuss all of the data used during the development of this report in detail, including:

- 1) [Summary of Prior CHNA Implementation Plans](#) – Information about Collaborative partners and actions taken to address the priority health needs identified in previous CHNAs are presented in Appendix 1.
- 2) [City Demographic and Socioeconomic Data](#) – Information regarding the population characteristics (such as age, gender, and race) of Baltimore City are presented in Appendix 2.
- 3) [Detailed Summary of Secondary Data Measures and Findings](#) – Existing data measures and findings used in the prioritization process are presented in Appendices 3-5.
- 4) [Detailed Summary of Primary Findings](#) – Summaries of new data findings from community member and key community health leader surveys as well as focus groups are presented in Appendices 6-7.

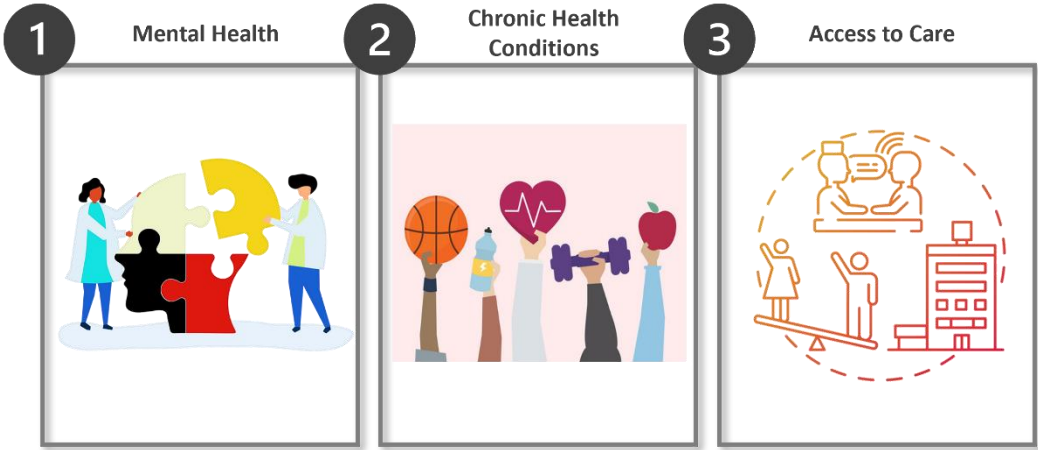
### **Summary Findings: Baltimore City Priority Health Need Areas**

To achieve the study objectives, both new and existing data were collected and reviewed. New data included information from web-based surveys of adults (18 years+) and focus groups; various local organizations, community members, and health service providers within Baltimore City participated. Existing data included information regarding city demographics, health and healthcare resources, behavioral health, disease trends, and more. The data collection and analysis process began in July 2023 and continued through to the development of this document.

Given the size and diversity of Baltimore City, both in geography and population, significant variations in demographics and health needs exist within its borders. At the same time, consistent needs are present across the whole city and serve as the basis for determining priority health needs at the city level. This document will discuss the priority health need areas for the City of Baltimore, as well as how the severity of those needs might vary across subpopulations based on the information obtained and analyzed during this process.

Through the prioritization process, the CHNA Collaborative identified Baltimore City's priority health need areas from a list of over 100 health indicators. Please note that the final priority needs were not ranked in any order of importance and the Collaborative and the LHIC will engage in each of the three priority need areas. After looking at all relevant data and feedback from the CHNA Collaborative, the three focus areas identified as citywide priorities for the 2023-2024 CHNA are mental health, chronic health conditions and access to care, as seen in Figure 1.3 below.

Figure 1.3: Priority Health Needs, 2023-2024



Health, healthcare and associated community needs are very much interrelated, and often impact each other. Although this CHNA process considered these areas separately, their impact on each other should be considered when planning for programs or services to address community needs.

Many health needs are related to underlying societal and socioeconomic factors. Research has consistently shown that income, education, physical environment, and other demographic and socioeconomic factors affect the health status of individuals and communities. This CHNA acknowledges that link and focuses on identifying and documenting the greatest health needs as they present themselves today. As plans are developed to address these needs, the Collaborative’s goal is to work with other community organizations to address underlying factors that could drive long-term improvements to the city population’s health.

For additional discussion of current priority needs and the data that supports those priorities, please see Chapter 3.

## CHAPTER 1 | METHODOLOGY

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### Study Design

The process used to assess Baltimore City’s community needs, challenges, and opportunities included multiple steps. Both new and existing data were used throughout the study to paint a more complete picture of the community’s health needs. While the CHNA Collaborative largely viewed the new and existing data equally, there were situations where one provided clearer evidence of community health need than the other. In these instances, the health needs identified were discussed based on the most appropriate data gathered. Data analysis, community feedback review, and stakeholder engagement were all used to identify key areas of need.

Specifically, the following data types were collected and analyzed:

#### New (Primary) Data

Public engagement and feedback were received through online community member and key health leader surveys, along with community focus groups and significant input and direction from the CHNA Collaborative and the LHIC. Additional prioritization meetings with three LHIC workgroups – Diabetes, Care Coordination and Social Determinants of Health – were also conducted to better understand community needs. The Collaborative worked together to develop the survey questions for the two web-based surveys. Community members were asked to identify the most significant health and social needs in their community, as well as asked questions about their experiences seeking or receiving medical care. Key leaders were asked to answer similar questions about the community they serve. Focus group participants were also asked a standard set of questions about health and social needs, in order to identify trends across various groups and to highlight areas of concern for specific populations. In total, the CHNA Collaborative was able to gather input from over 2,600 Baltimore City residents and other stakeholders. This included web survey responses from 2,282 community members and 33 key leaders, as well as 33 focus groups featuring more than 300 community members and other people who live, work or receive healthcare in Baltimore City.

For more information regarding specific questions asked as part of the focus groups and surveys, please refer to Appendix 6.

#### Existing (Secondary) Data

Key sources for existing data on Baltimore City included information provided by the Collaborative and a variety of public data sources related to demographics, social and economic determinants of health, environmental health, health status and disease trends, mental/behavioral health trends, and individual health behaviors. Key information sources used during this process included:

- *County Health Rankings*, developed in partnership by Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute
- Maryland Department of Health’s State Health Improvement Process (MD SHIP) and Division of Vital Records
- The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS)

- *The Opportunity Atlas*, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University
- *The National Equity Atlas*, developed by PolicyLink and the University of Southern California (USC) Equity Research Institute
- *Food Access Research Atlas*, published by the U.S. Food and Drug Administration
- *Minority Health Social Vulnerability Index*, published by U.S. Department of Health and Human Services Office of Minority Health
- *American Community Survey*, as collected and published by the U.S. Census Bureau
- Data provided by CHNA Collaborative members and other affiliated organizations, including CHNA reports from BCHD, St. Agnes, JHHS and JHBMC, Mercy, MedStar, MWPH, Sinai Hospital, and UMMC.

For more information regarding data sources and data time periods, please refer to Appendix 3.

### Comparisons

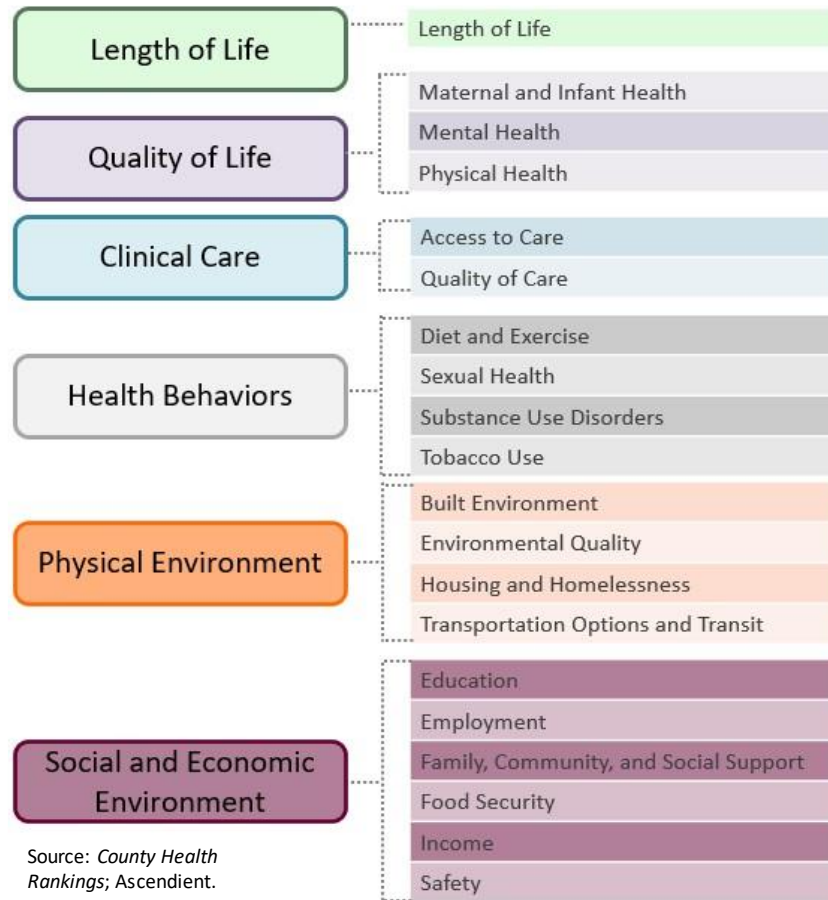
To understand the relevance of existing data collected throughout the process, each measure must be compared to a benchmark, goal, or similar geographic area. In other words, without being able to compare Baltimore City to an outside measure, it would be impossible to determine how the city is performing. For this process, each data measure was compared to outside data as available, including the following:

- *County Health Rankings Top Performers*: This is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that ranks counties across the nation by various health factors.
- *Baltimore County and State of Maryland*: The Collaborative determined that comparisons with Baltimore County and the state of Maryland as a whole were appropriate. While certain differences exist between the city and the county, the close proximity and overlap between resources creates a meaningful opportunity for comparison.

### Prioritization Process Overview and Results

The process of identifying the priority health needs for the 2023-2024 CHNA began with the collection and analysis of hundreds of new and existing data measures. In order to create more easily discussable categories, all individual data measures were then grouped into six categories and 20 corresponding focus areas based on “common themes,” as seen in Figure 2.1 below. These focus areas are detailed further in Appendix 4.

**Figure 2.1: Areas of Focus**

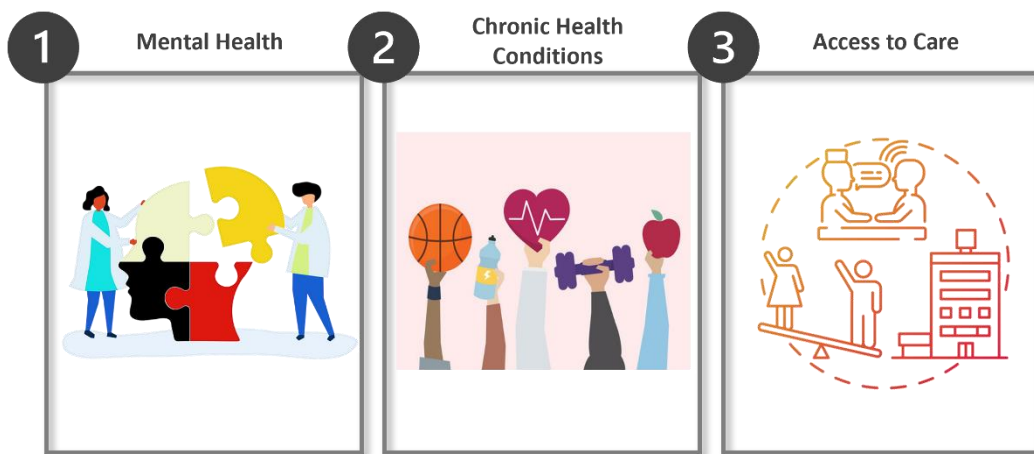


Since a large number of individual data measures were collected and analyzed to develop these 20 focus areas, it was not reasonable to make each of them a priority. The CHNA Collaborative considered which focus areas had data measures of high need or worsening performance, priorities from the primary data, and how possible it is for health departments or hospitals to impact the given need to help determine which health needs should be prioritized. Once the primary and secondary data had been grouped into the focus areas detailed in Appendix 3, the CHNA Collaborative used a polling software to evaluate and prioritize the city's health needs while considering the following factors:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Whether possible interventions would be possible and effective;
- Health disparities associated with the need; and
- Importance the community places on addressing the need

The final priority need areas were not ranked in any particular order of importance, and each will be addressed by the Collaborative. The following three focus areas (mental health, chronic health conditions and access to care) were identified as the City of Baltimore’s top priority health needs to be addressed over the next three years, as seen in Figure 2.2 below:

**Figure 2.2: Priority Health Needs, 2023-2024**



**Figure 2.3: Social Determinants of Health**

Throughout the process, the Collaborative also considered *Healthy People 2030’s* “Social Determinants of Health and Health Equity.” The CDC defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. These factors can include healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality, as outlined in Figure 2.3.<sup>4</sup>

### Social Determinants of Health



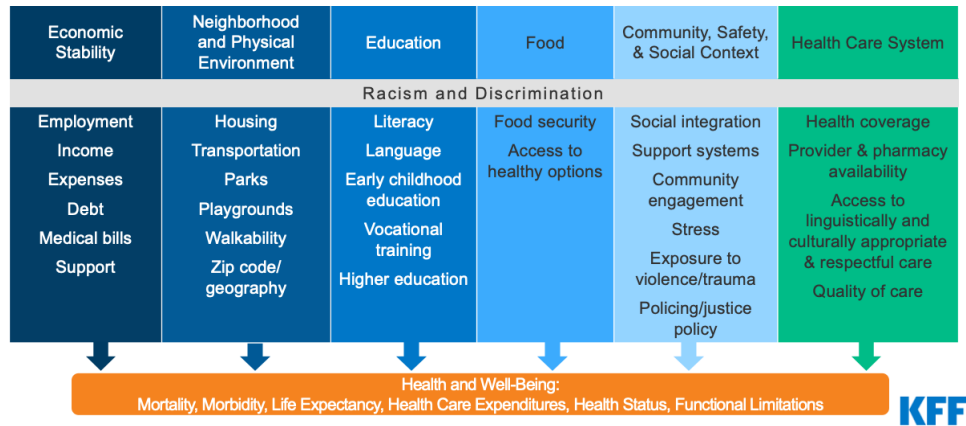
Recognizing that SDOH have an impact on health disparities and inequities in the community was a key point the Collaborative considered throughout the CHNA process. Figure 2.4 below describes the way various social and economic conditions may affect health and well-being.

Social Determinants of Health  
Copyright-free Healthy People 2030

<sup>4</sup> Source: CDC (2022). *Social Determinants of Health at CDC*. Accessed March 7<sup>th</sup>, 2024 via <https://www.cdc.gov/about/sdoh/index.html>

**Figure 2.4: SDOH and Health Disparities**

**Health Disparities are Driven by Social and Economic Inequities**



**Study Limitations**

Developing a CHNA is a long and time-consuming process. Because of this, more recent data may have been made available after the collection and analysis timeframe. Existing data typically become available between one and three years after the data is collected. This is a limitation, because the “staleness” of certain data may not depict current trends. For example, the U.S. Census Bureau’s American Community Survey is a valuable source of demographic information, however data for a particular year is not published until late the following year. This means 2022 data on community characteristics, such as languages spoken at home, did not become available until late fall 2023. The Collaborative tried to account for these limitations by collecting new data, including focus groups and web-based community member and key community leader surveys. Another limitation of existing data is that, depending on the source, it may have limited demographic information, such as gender, age, race, and ethnicity.

Given the size of Baltimore City in both population and geography, this study was limited in its capacity to fully capture health disparities and health needs across racial and ethnic groups. While efforts were made to include diverse community members in survey efforts, roughly 48% of all respondents were Black or African American, and another 41% were white. Although survey respondents could choose from multiple race or ethnicity categories,<sup>5</sup> limited responses were received from these groups; however, nearly 18% of respondents described their ethnicity as Hispanic or Latino. This made it difficult for the Collaborative to assess health needs and disparities for other racial/ethnic minority groups in the community.

In addition, there are existing gaps in information for some population groups. Many available datasets are not able to isolate historically underserved populations, including the uninsured, low-income persons, and/or certain minority groups. Despite the lack of available data, attempts were made to include underserved sub-segments of the greater population through the new data gathered throughout the CHNA process. For example, the CHNA Collaborative chose to focus on Spanish-speaking members of the community by providing a Spanish language version of the web-based community survey and facilitating Spanish-language focus groups. Paper surveys were also distributed in an effort to reach as much of the community as possible, although usage of paper surveys was low. To increase future survey responses,

<sup>5</sup> Categories included Asian, American Indian/Alaskan Native (AIAN), Black or African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander (NHPI) and White.

members of the Collaborative should consider working directly with partner organizations in the community who can connect directly with populations who are hard to access through traditional outreach methods, including people with disabilities, the uninsured and people who are disengaged.

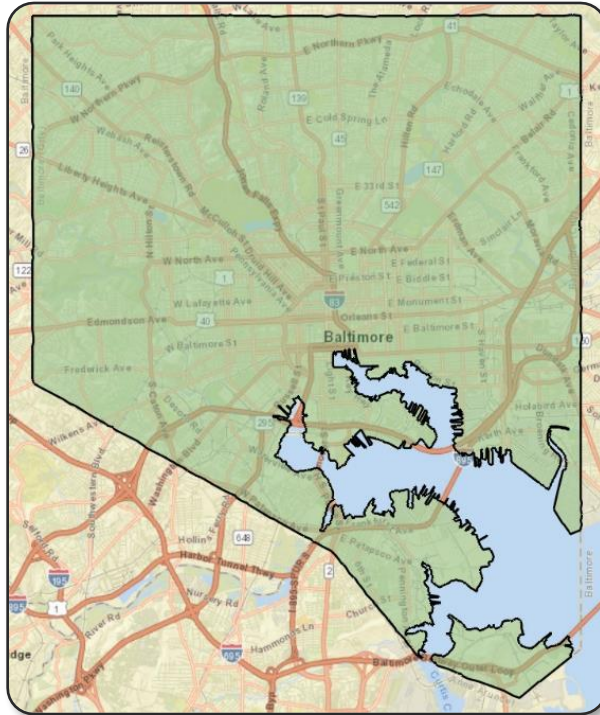
In the future, assessments should make efforts to include other underserved communities whose needs are not specifically discussed here because of data and input limitations during this CHNA cycle. Of note, residents in the disabled, blind, deaf, and hard-of-hearing communities can be a focus of future new data collection methods. Using a primarily web-based survey collection method might have also impacted response rates of community members with no internet access or low technological literacy. Additionally, more input from both patients and providers of SUD services would also be helpful in future assessments.

Finally, parts of this assessment have relied on input from local residents and key community health leaders through the aforementioned online surveys and focus groups. Since it would be unrealistic to gather input from every single member of the community, the community members that participated have offered their best expertise and understanding on behalf of the entire community. As such, the CHNA Collaborative has assumed that participating community members accurately and completely represented their fellow residents.

**Geography**

Baltimore City occupies 81 square miles of land in the geographic center of Baltimore County, and consequently, the state of Maryland. Baltimore County surrounds most of Baltimore City, however, the city was separated from the county in 1851. Today, Baltimore City is an independent city on par with county jurisdictions.

**Figure 3.1: Baltimore City Map**



**Population**

Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

With a population of roughly 575,000 people, Baltimore City is the largest city in Maryland.

Table 3.1: Total Population, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Population	573,794	859,710	6,259,408	337,470,185

Source: Esri 2023

## Age and Sex Distribution

Data on age and sex helps health providers understand who lives in the community and informs planning for needed health services. The age distribution of Baltimore City skews slightly younger than that of Baltimore County, Maryland, and the U.S. Younger populations are likely to need more preventive services and health education, while older populations may have a need for higher acuity healthcare and specialized services such as cancer care or chronic disease management.

	Baltimore City	Baltimore County	Maryland	United States
Percentage below 15	16.8%	16.4%	17.6%	18.0%
Percentage between 15 and 44	43.7%	38.9%	39.2%	39.6%
Percentage between 45 and 64	23.0%	24.9%	25.7%	24.6%
Percentage 65 and older	16.5%	19.7%	17.5%	17.8%

Source: Esri 2023

Baltimore City's population skews more heavily female compared to the state of Maryland, and the U.S.

	Baltimore City	Baltimore County	Maryland	United States
Female	52.8%	52.2%	51.3%	50.6%
Male	47.2%	47.8%	48.7%	49.4%

Source: Esri 2023

## Race and Ethnicity

Data on race and ethnicity help us understand the need for healthcare services as well as cultural factors that can impact how care is delivered. Almost 60% of Baltimore City residents identify as Black or African American, roughly double the proportion found in Baltimore County and the state of Maryland, and nearly five times that of the U.S. as a whole.

	Baltimore City		Baltimore County		Maryland		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Black Non-Hispanic	332,377	57.9%	260,766	30.3%	1,834,049	29.3%	40,898,542	12.1%
White Non-Hispanic	146,924	25.6%	431,552	50.2%	2,867,623	45.8%	191,314,266	56.7%
Asian	21,210	3.7%	57,506	6.7%	439,514	7.0%	20,811,620	6.2%
AIAN	1,270	0.2%	1,921	0.2%	11,977	0.2%	2,284,715	0.7%
NHPI	152	0.0%	255	0.0%	2,635	0.0%	643,202	0.2%

Source: Esri 2023

By ethnicity, less than 10% of Baltimore City’s population is Hispanic.<sup>6</sup> The proportion of Hispanic individuals residing in Baltimore City is slightly higher than in Baltimore County but lower than in the state of Maryland and the U.S. overall.

	Baltimore City		Baltimore County		Maryland		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Non-Hispanic	525,925	91.7%	793,133	92.3%	5,470,733	87.4%	271,934,049	80.6%
Hispanic	47,869	8.3%	66,577	7.7%	788,675	12.6%	65,536,136	19.4%

Source: Esri 2023

The proportion of foreign-born individuals residing in Baltimore City is lower than that of Baltimore County, Maryland, and the U.S. overall.

	Baltimore City	Baltimore County	Maryland	United States
Foreign Born	9.7%	13.0%	16.7%	13.9%

Source: U.S. Census Bureau (2022), American Community Survey (2018-2022)

The diversity of Baltimore City and Baltimore County is reflected in the languages that their residents speak at home. According to the most recent American Community Survey, approximately 10% of Baltimore City and 15% of Baltimore County residents indicated that they speak a language other than English at home, compared to around 20% of Maryland and U.S. residents. Less than 5% of city or county residents speak Spanish at home. Spanish is more commonly spoken at home in the state of Maryland and the U.S. overall.

	Baltimore City	Baltimore County	Maryland	United States
English Only	89.0%	85.8%	79.3%	78.0%
Spanish	4.7%	4.0%	8.9%	13.3%
Indo-European Languages	2.5%	4.5%	4.7%	3.8%
Asian and Pacific Islander Languages	1.9%	2.7%	3.9%	3.6%
Other Languages	1.8%	3.0%	3.2%	1.2%

Source: American Community Survey 2022 1-Year Estimates

<sup>6</sup> Race and ethnicity (Hispanic origin) are two separate concepts, according to federal guidelines. People who are Hispanic may be of any race, and people in each race group may be either Hispanic or Not Hispanic. Source: [U.S. Census Bureau Guidance on the Presentation and Comparison of Race and Hispanic Origin Data](#).

## Economic Indicators

In addition to demographic data, socioeconomic factors in the community such as income, poverty, and food scarcity play a significant role in identifying healthcare needs. The median household income in Baltimore City is approximately 60-70% that of Baltimore County, Maryland, and the U.S. overall, contributing to, among other things, higher rates of uninsured and underinsured residents who face barriers to accessing quality healthcare services. These disparities contribute to poorer health outcomes and lower life expectancy for Baltimore City residents, especially for those who are Black, Hispanic, or living in poverty. Some of the causes of these inequities include historical and structural racism, lack of affordable housing, low educational attainment, and limited economic opportunities.

**Table 3.8: Median Household Income, 2023**

	Baltimore City	Baltimore County	Maryland	United States
Income	\$55,224	\$82,607	\$93,432	\$72,603

Source: Esri 2023

In 2021, approximately 20% of Baltimore City households were below the federal poverty level (FPL) – more than double the share of households below the FPL in Baltimore County, Maryland, and the U.S. overall. Poverty has a significant impact on health. Across the lifespan, people who live in impoverished communities have a higher risk of poor health outcomes, including mental illness, chronic diseases, higher mortality and lower life expectancy. Poverty is a concern across the lifespan; children who live in poverty are at risk for developmental delays, toxic stress and poor nutrition, and are likely to live in poverty as adults as well. Unmet social needs, including having low or no income, can also limit people’s ability to access healthcare when they need it, or to provide for basic necessities needed to live healthy lives, such as safe housing or healthy food.<sup>7</sup>

**Table 3.9 Percent of Households Below the Federal Poverty Level, 2021**

	Baltimore City	Baltimore County	Maryland	United States
Percent Below FPL	19.6%	9.1%	9.1%	12.4%

Source: Esri 2023

Similar to the percentage of households below the FPL, 23% of Baltimore City households received Food Stamps/SNAP<sup>8</sup> in 2021. This is more than double the percentage reported in Baltimore County, Maryland, and the U.S. overall.

<sup>7</sup> Source: Healthy People 2030 (2023). *Poverty*. Accessed March 7<sup>th</sup>, 2024 via:

<https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

<sup>8</sup> The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to eligible, low-income individuals and households. It is the largest Federal nutrition assistance program. Source: [USDA Supplemental Assistance Program fact sheet](#).

**Table 3.10: Households Receiving Food Stamps/SNAP, 2021**

	Baltimore City	Baltimore County	Maryland	United States
Number of Households Receiving Food Stamps/SNAP	56,208	34,031	238,288	14,105,231
Total Number of Households	244,893	326,932	2,294,270	124,010,992
Percentage of Households receiving Food Stamps/SNAP	23.0%	10.4%	10.4%	11.4%

Source: Esri 2023

In 2023, 12.3% of Baltimore City residents had earned less than a high school diploma and 29.1% had a high school diploma or GED – proportions that are higher than Baltimore County, Maryland or the U.S. overall. Conversely, a smaller proportion of Baltimore City residents had completed some college (22.6%) or earned a bachelor’s degree (18.3%) compared to the county, the state or the nation. However, both Baltimore City and Baltimore County had a higher percentage of residents with graduate or professional degrees than the U.S overall, indicating a high level of educational achievement among some segments of the population.

**Table 3.11: Educational Attainment, 2023**

	Baltimore City	Baltimore County	Maryland	United States
Less than 9 <sup>th</sup> Grade	3.5%	2.6%	3.2%	4.1%
Some High School/No Diploma	8.8%	4.8%	4.9%	5.5%
High School Diploma	23.9%	22.1%	21.4%	22.9%
GED/Alternative Credential	5.2%	3.3%	3.1%	4.1%
Some College/No Diploma	16.9%	17.1%	16.4%	17.7%
Associate’s Degree	5.7%	7.8%	7.5%	9.5%
Bachelor’s Degree	18.3%	23.8%	23.3%	22.3%
Graduate/ Professional Degree	17.7%	18.4%	20.2%	13.9%

Source: Esri 2023

The overall unemployment rate in Baltimore City was higher than Baltimore County, Maryland, and the U.S. overall in 2023. This was a consistent finding across all age groups, with the highest unemployment among city residents ages 25 to 54 (2.8%). Unemployment among older adults (ages 65+) was 2.5 times higher than the rate in the state of Maryland.

	Baltimore City	Baltimore County	Maryland	United States
Percentage unemployed ages 16 to 24	1.7%	1.3%	1.2%	1.3%
Percentage unemployed ages 25 to 54	2.8%	1.9%	1.9%	2.2%
Percentage unemployed ages 55 to 64	0.7%	0.6%	0.5%	0.6%
Percentage unemployed ages 65 or more	0.5%	0.3%	0.2%	0.2%
Total unemployment	5.7%	4.1%	3.8%	3.7%

Source: Esri 2023

In 2023, the group in both Baltimore City and Baltimore County least likely to have health insurance was adults ages 35 to 64. Baltimore City has proportions of uninsured individuals across almost every age group that are lower than the U.S. as a whole, but similar to both Baltimore County and Maryland.

	Baltimore City	Baltimore County	Maryland	United States
Percentage uninsured ages 18 or below	0.8%	0.9%	0.9%	1.3%
Percentage uninsured ages 19 to 34	2.2%	1.9%	2.1%	3.2%
Percentage uninsured ages 35 to 64	2.9%	2.3%	2.8%	4.2%
Percentage uninsured ages 65 or more	0.1%	0.1%	0.1%	0.1%

Source: Esri 2023

### Social Determinants of Health

In addition to the considerations noted above, there are many other factors that can positively or negatively influence a person’s health. The Collaborative recognizes this and believes that, to portray a complete picture of the city’s health status, it first must address the factors that impact community health. The Centers for Disease Control and Prevention (CDC) defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. According to the CDC’s “Social Determinants of Health” “Social Determinants of Health” from its *Healthy People 2030* public health priorities initiative, factors contributing to an individual’s health status can include the following: healthcare access and quality, neighborhood and built environment, social and

**Figure 3.2: Social Determinants of Health**



community context, economic stability, and education access and quality.

As seen in Figure 3.2, many of the factors that contribute to health are hard to control or societal in nature. As such, health and healthcare organizations need to consider many underlying factors that may impact an individual’s health and not simply their current health conditions.

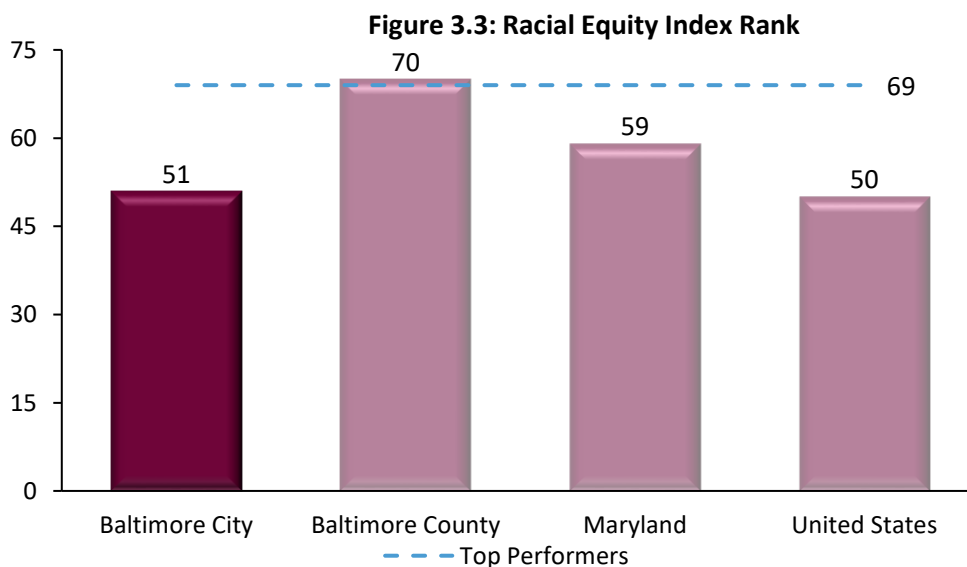
It is widely acknowledged that people with lower income, social status and levels of education find it harder to access healthcare services compared to people in the community with more resources. Being unable to access healthcare services is a factor that contributes to poor health status. Further, people in communities with fewer resources may also experience high levels of stress, which also contributes to worse health outcomes, particularly related to mental and behavioral health.

The CHNA Collaborative collected new data via focus groups and various surveys to ensure that residents and key community health leaders could provide input regarding the needs of their specific communities. An analysis of the racial and geographic disparities that emerged in the information obtained and analyzed during this process is detailed below.

### Disparities

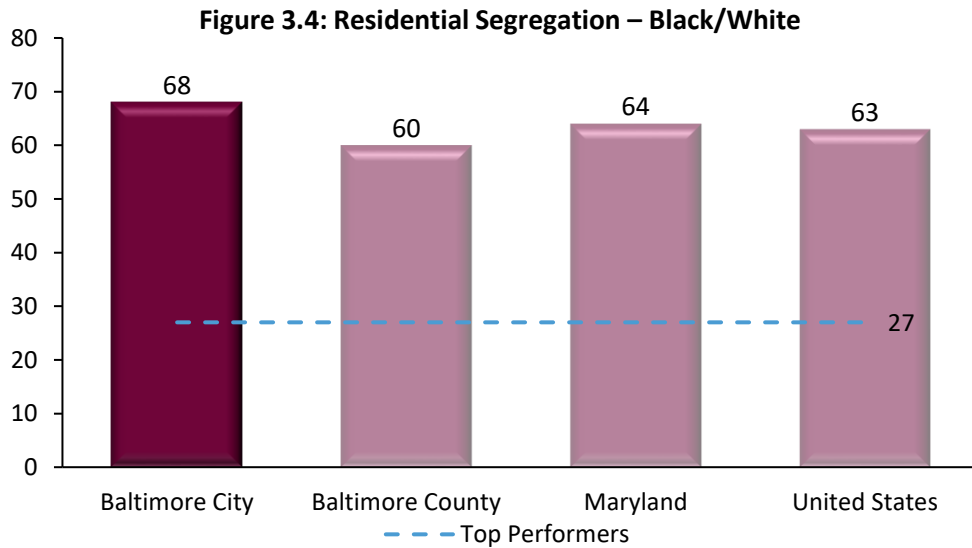
Recognizing the diversity of Baltimore City, as discussed above, the Collaborative evaluated factors that may contribute to health disparities in its community. These included racial equity; racial segregation; financial barriers; nutrition; social, behavioral, and economic factors that influence health; and English language proficiency. As detailed below, Baltimore City has greater disparity and housing segregation between racial groups and a higher level of income inequality when compared to the county or state.

The Racial Equity Index measures disparities between racial groups based on inclusion and prosperity. As seen in Figure 3.3, Baltimore City performs lower than the county and the state of Maryland, and slightly higher than the U.S. overall. Higher scores are better and indicate smaller racial gaps. In this graphic and the following, the blue line indicates scores for geographies that perform best in that indicator.



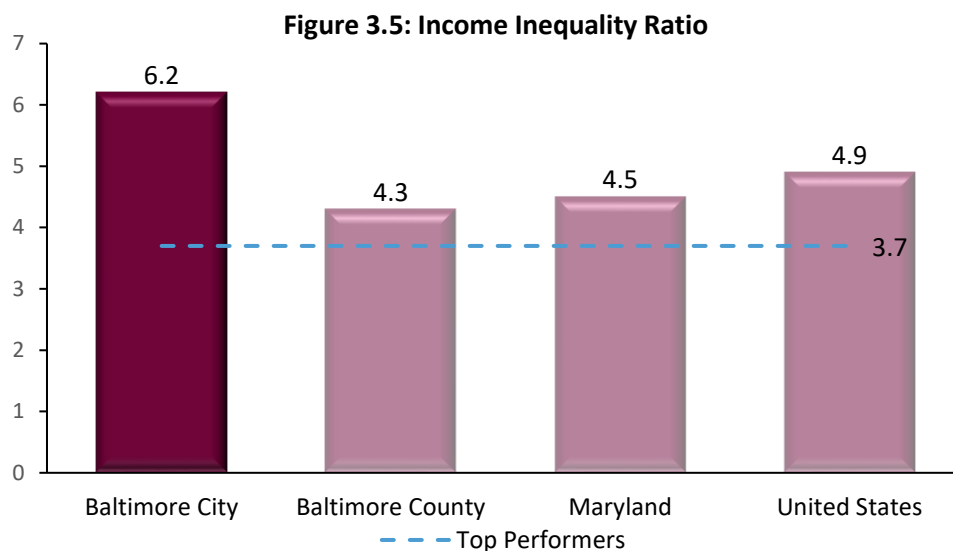
Source: National Equity Atlas 2020

Residential segregation is measured by the index of dissimilarity, a demographic measure ranging from 0 to 100 that represents how evenly two demographic groups are distributed across a county’s census tracts. Lower scores represent a higher level of integration. Baltimore City has a higher level of segregation between Black and white residents than Baltimore County, Maryland and the U.S. overall, as seen in Figure 3.4.



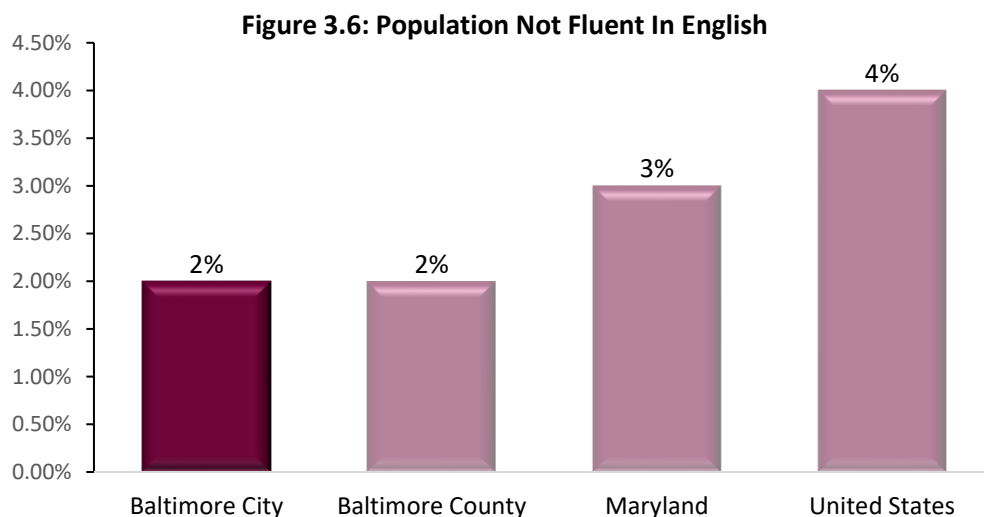
Source: Robert Wood Johnson County Health Rankings 2023

Income inequality is measured as a ratio of household income at the 80<sup>th</sup> percentile to household income at the 20<sup>th</sup> percentile. Communities with greater income inequality may have worse outcomes on metrics such as mortality, poor health, sense of community, and social support. As seen in Figure 3.5, Baltimore City’s has a much higher income inequality ratio than the county, the state and the U.S. overall.



Source: Robert Wood Johnson County Health Rankings 2023

People with limited English proficiency (LEP) may face greater challenges accessing care and resources compared to fluent English speakers. Language barriers may make it hard to access transportation, medical, and social services as well as limit opportunities for education and employment. Importantly, LEP community members may not understand critical public health and safety notifications, such as safety-focused communications during the COVID-19 pandemic. In 2022, just 2% of Baltimore City residents reported speaking English less than “very well.” This is comparable to the rate of Baltimore County, but lower than the rates in Maryland and the U.S., as seen in Figure 3.6.



Source: American Community Survey 5-year estimates (2017-2022)

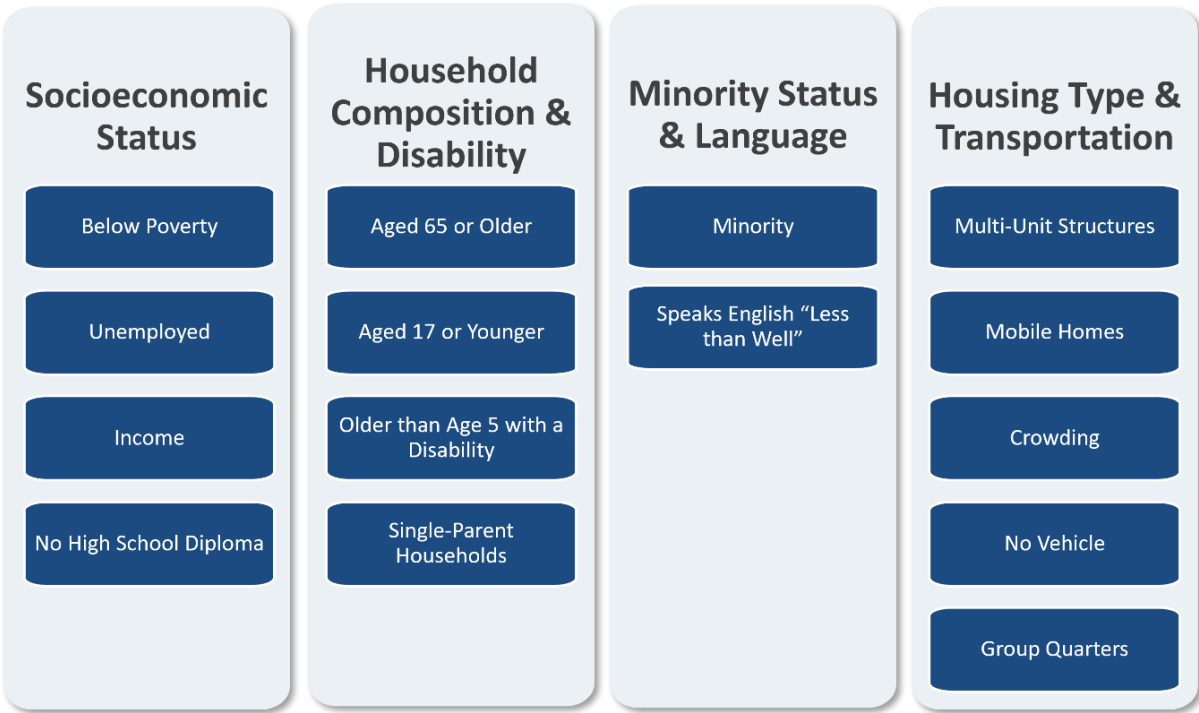
### Social Vulnerability Index

One resource that can help show variation and disparities between geographic areas is the Social Vulnerability Index (SVI), which was developed by the CDC and the Agency for Toxic Substances and Disease Registry (ATSDR). Social vulnerability refers to negative effects communities may experience due to external stresses that impact human health, like natural or human-caused disasters, or disease outbreaks. Socially vulnerable populations are at especially high risk during public health emergencies.

The SVI uses 16 U.S. Census variables to help local officials identify communities that may need support before, during, or after a public health emergency.<sup>9</sup> Communities with a higher SVI score are generally at a higher risk for poor health outcomes. Instead of relying on public health data alone, the SVI accounts for underlying economic and structural conditions that affect overall health, including SDoH. SVI scores are calculated at the census tract level and based on U.S. Census variables across four related themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type/transportation. Figure 3.7 outlines the variables used to calculate SVI scores.

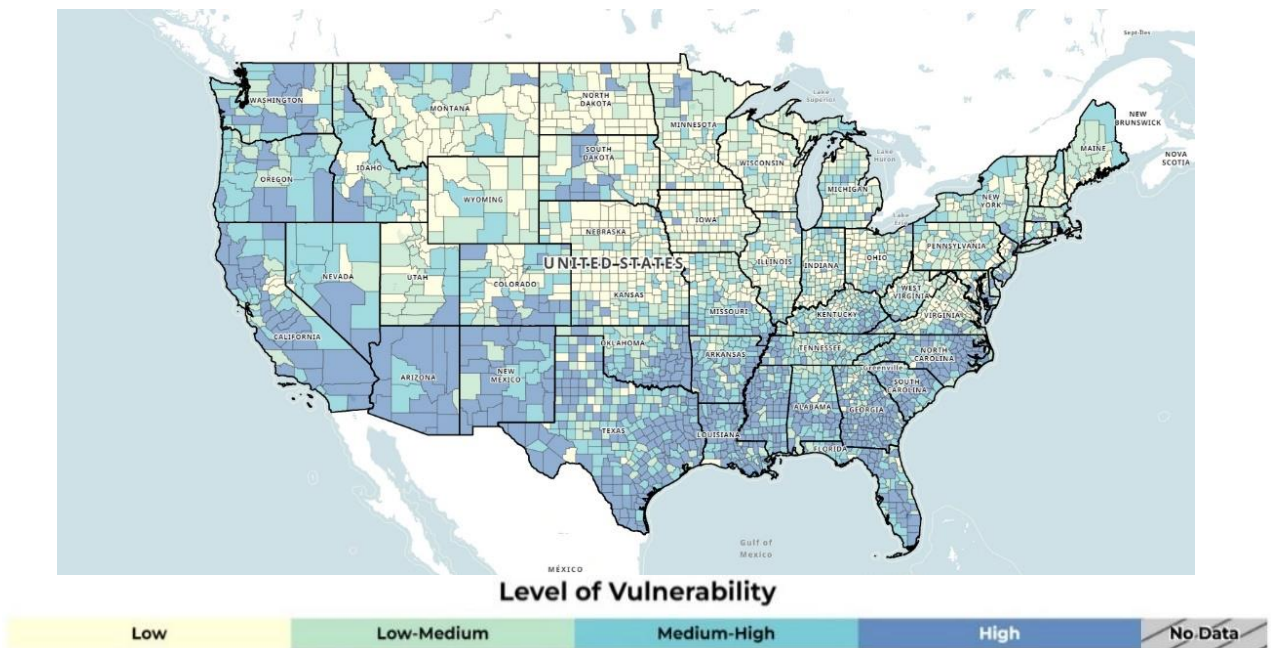
<sup>9</sup> Tsai, et al (2022). CDC/ATSDR Social Vulnerability Index (SVI). Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

**Figure 3.7: Social Vulnerability Index Indicators**



The United States SVI by county is shown in Figure 3.8 below. As shown, a lot of variation exists across the country, and even within individual states.

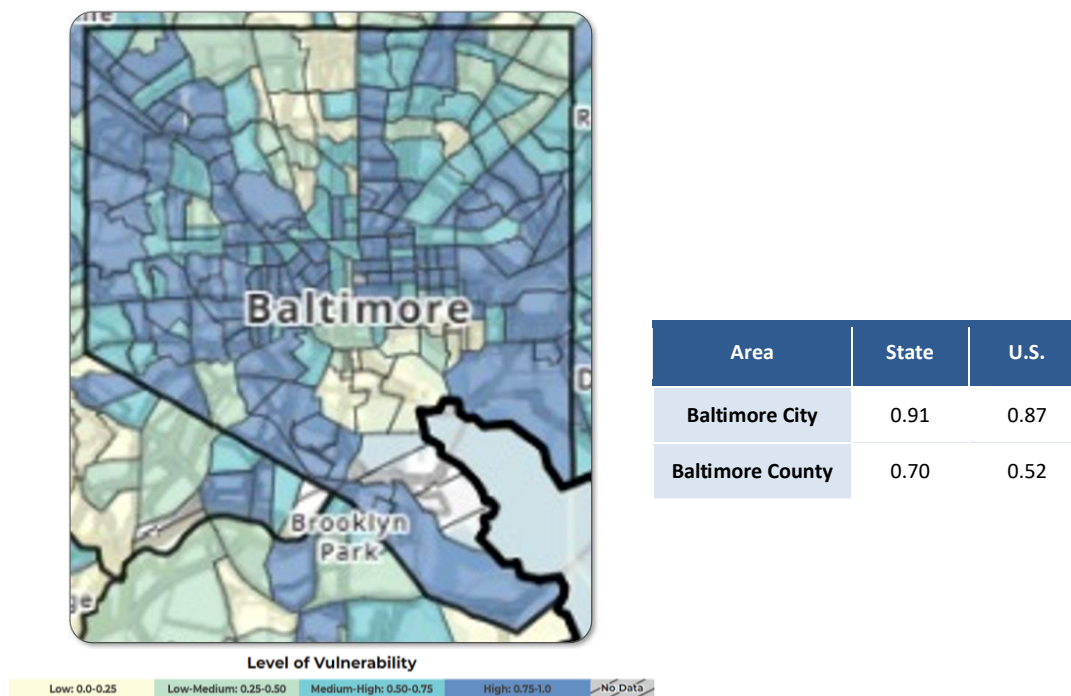
**Figure 3.8: Social Vulnerability Index by U.S. County, 2020**



Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

The 2020 SVI scores for Baltimore City and Baltimore County are shown in Figure 3.9 below. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), and these scores show a relative comparison with other counties and census tracts in Maryland. Given this, the vulnerability of Baltimore City overall is very high compared to the state, with an SVI score of 0.91. Baltimore City’s SVI score is also high when compared to the U.S. as a whole (0.87). Many neighborhoods throughout the city demonstrate the highest level of vulnerability, shown as the darkest blue in the city map. However, vulnerability is not evenly distributed throughout the city, with some neighborhoods surrounding the Inner Harbor and located in the north-central parts of the city showing lower vulnerability.

**Figure 3.9: Baltimore City Social Vulnerability Index, 2020**



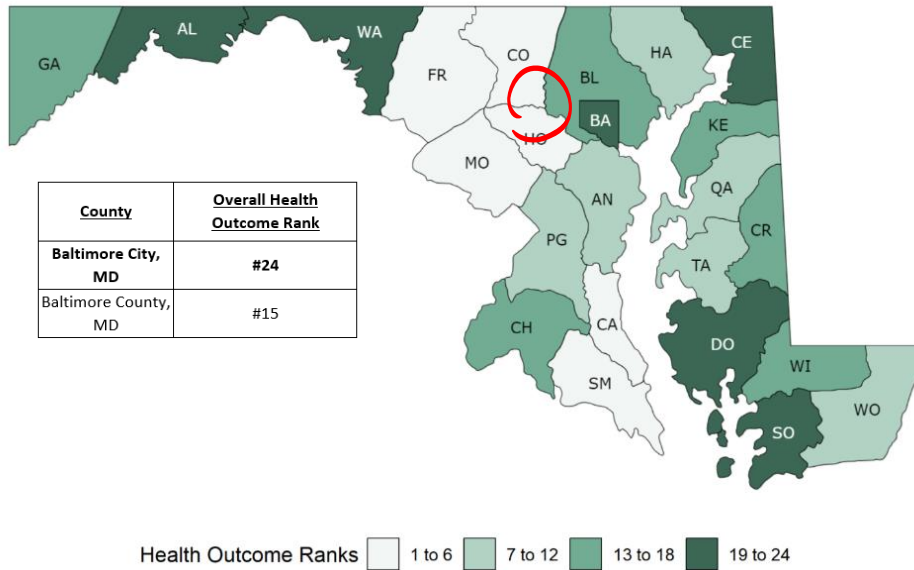
Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

### Health Outcome and Health Factor Rankings

The Collaborative also reviewed and analyzed data from the Robert Wood Johnson Foundation and the University of Wisconsin County Health Rankings for the year 2023. Out of 24 reported counties in Maryland for health outcomes, Baltimore City ranks 24<sup>th</sup> overall, as seen in Figure 3.10. This includes ranking 24<sup>th</sup> among 24 reported counties on both Length of Life and Quality of Life. These categories are discussed further in Appendices 2 through 4.

**Figure 3.10**

### 2023 Health Outcomes - Maryland

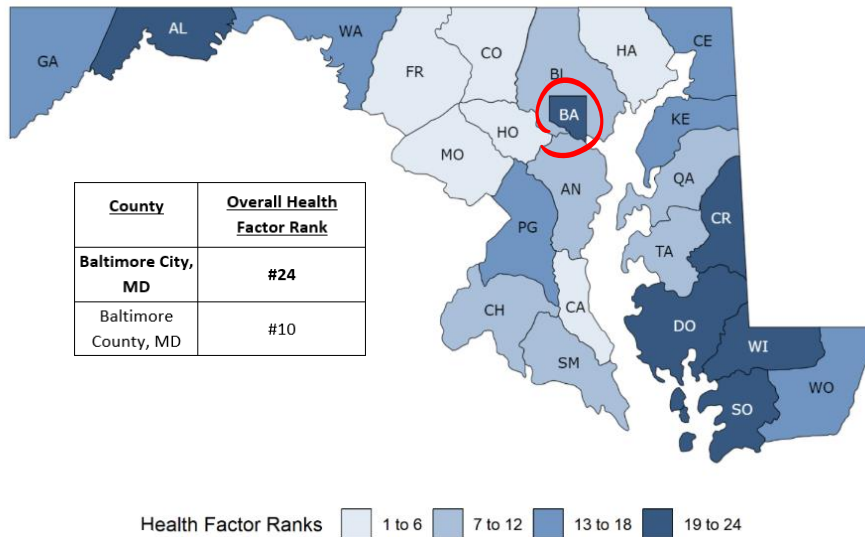


Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

Lastly, out of 24 reported counties in Maryland for health factors, Baltimore City also ranks 24<sup>th</sup> overall, as seen in Figure 3.11 below. This includes ranking 23<sup>rd</sup> among 24 reported counties for Health Behaviors and 24<sup>th</sup> for Social & Economic factors.

**Figure 3.11**

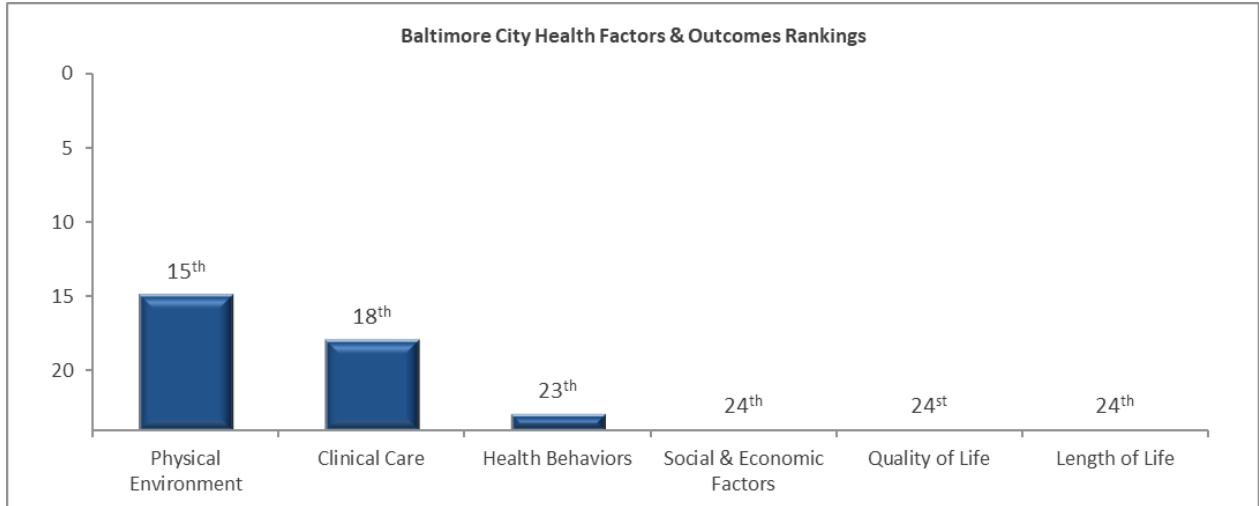
### 2023 Health Factors - Maryland



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings

Figure 3.12 shows that Baltimore City also ranks 15<sup>th</sup> among 24 reported Maryland counties for Physical Environment and 18<sup>th</sup> for Clinical Care. These categories are also discussed further in Appendices 2 through 4.

**Figure 3.12 Baltimore City Health Factors and Outcomes**



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

## CHAPTER 3 | PRIORITY NEED AREAS

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This chapter describes each of the three priority areas in more detail and discusses the data that supports each priority. The information in this section includes context and national perspective, secondary data findings, and primary data findings (including key leader survey, community member survey, and focus groups).

As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by the Collaborative in health improvement plans guided by this CHNA. As noted in Chapter 1, the CHNA Collaborative considered the following factors when determining the priority needs reported in this assessment:

- Size and scope of the health need
- Severity and intensity of the health need
- Estimated feasibility and effectiveness of possible interventions
- Health disparities associated with the need
- Importance the community places on addressing the need

### **Priority Need: Mental Health**

#### Context and National Perspective

Mental health is the state of one’s emotional, psychological, and social well-being, according to the Centers for Disease Control and Prevention (CDC).<sup>10</sup> While mental health is often used to describe conditions related to both behavioral health and substance use, it is specifically being used to describe conditions related to mental illness or wellness in this report. After evaluating data from a variety of sources including surveys and focus groups conducted throughout the assessment process, the Collaborative identified mental health to be an area of urgent need within Baltimore City.

Mental illnesses are common in the United States: in 2021, an estimated 57.8 million U.S. adults – nearly one in five – were living with a mental illness.<sup>11</sup> Four years following the onset of the COVID-19 pandemic, concerns about mental health remain high nationwide. The pandemic impacted public mental health and well-being in many ways. Community members continue to grapple with the pandemic-related effects of isolation and loneliness, financial instability, long-term health impacts and grief. In addition, both drug

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<sup>10</sup> Source: Centers for Disease Control and Prevention (CDC) (2023). *About Mental Health*. Retrieved February 2<sup>nd</sup>, 2024 from <https://www.cdc.gov/mentalhealth/learn/index.htm>.

<sup>11</sup> Source: National Institute of Mental Health (2023). *Mental Illness*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.nimh.nih.gov/health/statistics/mental-illness>.

overdose and suicide deaths have sharply increased over the past several years – often disproportionately impacting younger people and communities of color.<sup>12</sup>

Access to services that address mental health is an ongoing challenge across the U.S. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2021, less than half (47.2%) of U.S. adults who reported having a mental illness utilized any type of mental health services, including inpatient, outpatient or telehealth services or prescription drug therapies.<sup>13</sup> Demand for mental health services, particularly anxiety and depression treatment, remains high across the nation, while the prevalence of stress- and trauma-related disorders, along with substance use disorders, continues to grow. The American Psychological Association reports that the percentage of psychologists in the U.S. seeing more patients than they did before the pandemic increased from 15% in 2020 to 38% in 2021 to 43% in 2022. Further, 60% of psychologists reported having no openings for new patients and 38% maintained a waitlist for their services.<sup>14</sup>

### Secondary Data Findings

Secondary data collected through the CHNA process identified mental health as an area of particular concern for residents of Baltimore City. In 2021, 20.7% of Baltimore City residents self-reported that a health professional has told them that they have a depressive disorder, higher than both the state of Maryland (16.6%) and the US (20.5%). Multiple mental health indicators in Baltimore City were higher than the state and national averages, with 16% of the population experiencing frequent mental distress (compared to 13% for state and 14% for national, respectively), and residents reporting an average of 5.4 poor mental health days per month (4.1 for state and 4.4 for national, respectively).

Indicator	Baltimore City	Baltimore County	Maryland	United States
Percent of Population Experiencing Frequent Mental Distress	16%	15%	13%	14%
Number of Poor Mental Health Days in the Past Month	5.4	4.5	4.1	4.4

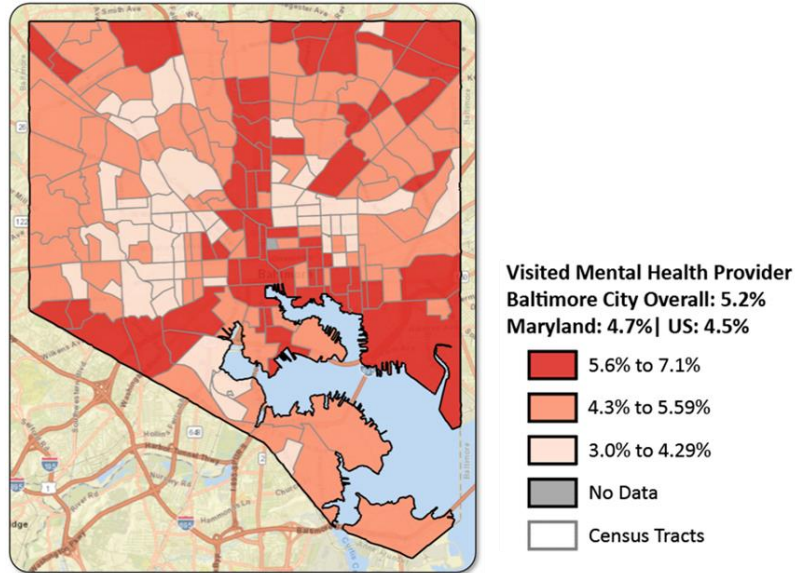
Figure 4.1 shows that, in 2021, there were more visits to mental health providers concentrated around Baltimore’s Downtown core, and fewer visits occurring in the western regions of the city. Similar trends are reflected in both antidepressants and antianxiety medication usage in Baltimore City, as seen in figure 4.2.

<sup>12</sup> Source: Panchal, N., Saunders H., Rudowitz, R. and Cox, C. (2023). The Implications of COVID-19 for Mental Health and Substance Use. *Kaiser Family Foundation*. Retrieved from <https://www.kff.org/mental-health/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use>.

<sup>13</sup> Source: SAMHSA (2023). *Highlights from the 2022 National Survey on Drug Use and Health*. Retrieved January 16<sup>th</sup>, 2023, from <https://www.samhsa.gov/data/sites/default/files/reports/rpt42731/2022-nsduh-main-highlights.pdf>.

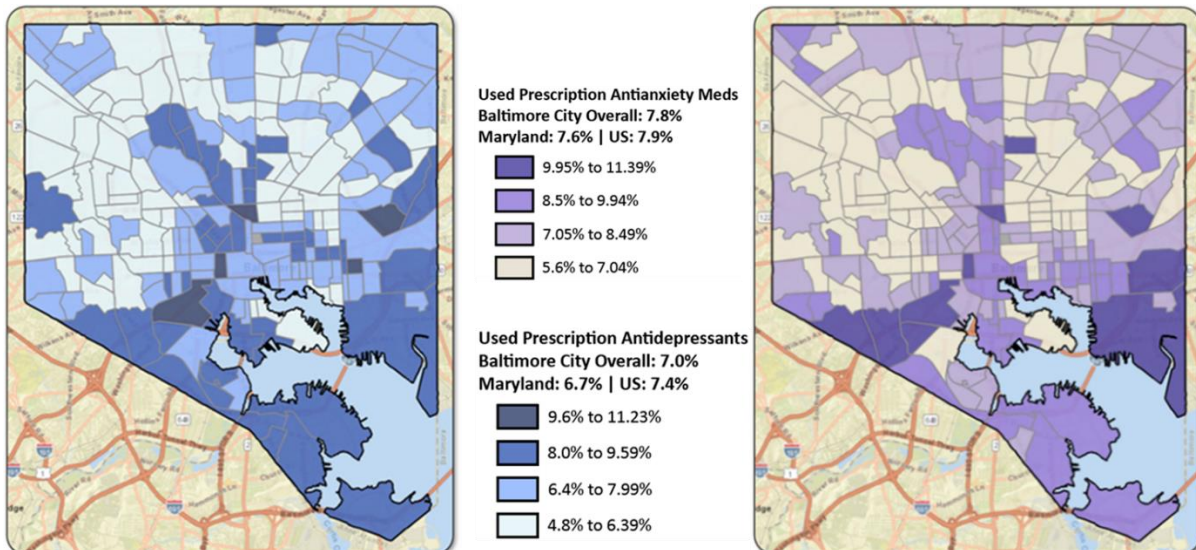
<sup>14</sup> Source: American Psychological Association (2022). *2022 COVID-19 Practitioner Impact Survey*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.apa.org/pubs/reports/practitioner/2022-covid-psychologist-workload.pdf>.

**Figure 4.1: Percentage of Population who Visited a Mental Health Provider, 2021**



In 2021, 7.0% of Baltimore City residents used prescription antidepressants, which was slightly higher than the state average of 6.7%. As described above, there is a nearly identical geographic distribution in the usage of antidepressants and anti-anxiety medication as mental health provider visits. As Figure 4.2 shows, the highest concentration of usage occurred in the neighborhoods adjacent to the southern city border, especially the southeastern region surrounding the harbor.

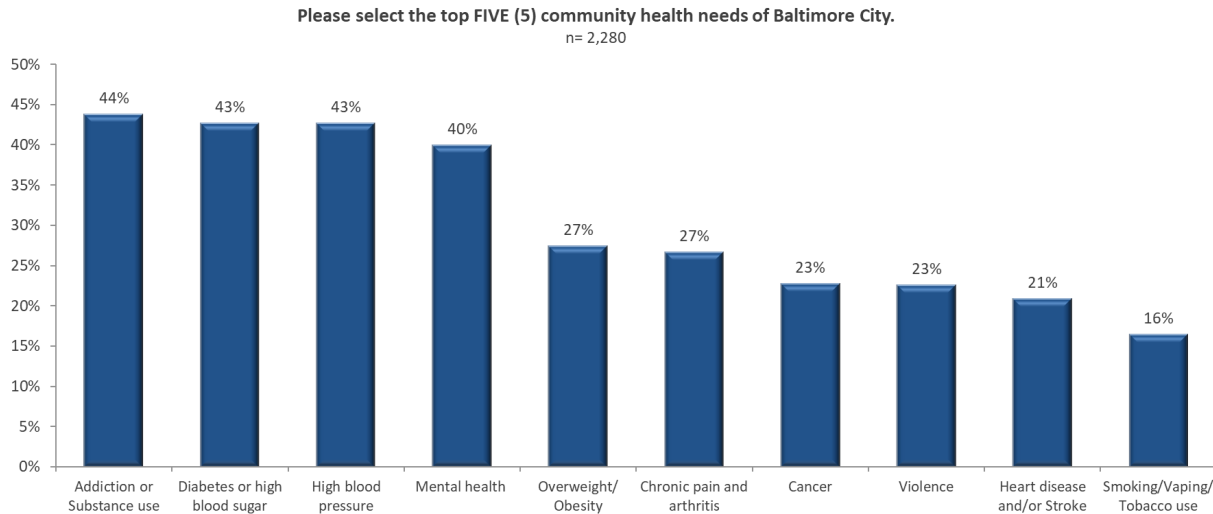
**Figure 4.2: Percentage of Population who Used Prescription Antidepressants and Anti-Anxiety Medications, 2021**



## Primary Data Findings – Community Member Survey

The Baltimore City community member survey received nearly 2,300 responses. When asked to identify the top five community health needs in Baltimore City, mental health was identified as a top concern by 40% of respondents.

**Figure 4.3**



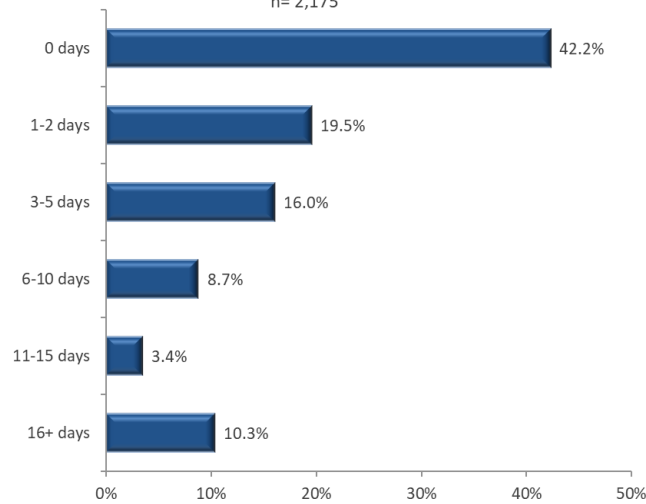
During the CHNA process, some community health data was broken down by age, gender, race and ethnicity, in order to further determine specific need in populations. When reviewing responses identifying the top 5 community health needs, white respondents were more likely to rank mental health as a top concern (45%) when compared to Black (38%) or Hispanic (39%) respondents. Female respondents also ranked mental health higher than male respondents (40% vs. 36%). When breaking down the responses by age group, younger respondents ranked mental health higher than their older counterparts, with those between the ages of 30-39 ranking mental health the highest (53%).

Initial responses related to individual mental health concerns were largely positive, with nearly half of respondents (42.2%) reporting that they had not experienced any poor mental health days the prior 30-day period. Conversely, just under half of respondents reported that they had experienced between 1 and 10 poor mental health days in the previous month (44%), and an additional 14% reported having poor mental health on 11 or more days in the previous month. While the majority of Baltimore City residents reported fewer poor mental health days than the state average (4.1 days per month), a significant proportion of residents (14%) spent more than one-third of the month experiencing mental health concerns, as seen in Figure 4.4.

**Figure 4.4**

For how many of the last 30 days did you experience poor mental health?

n= 2,175



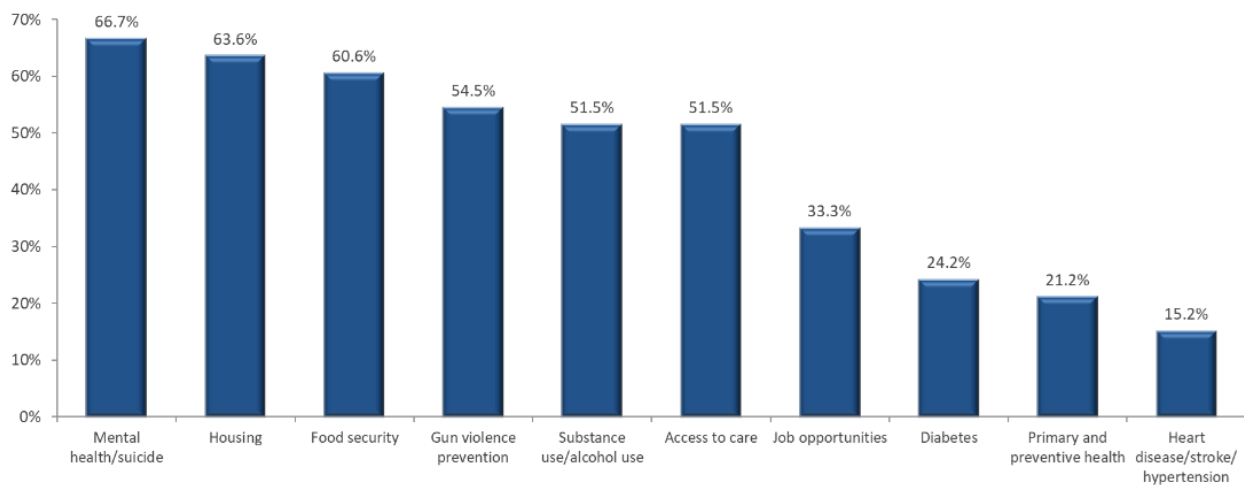
Primary Data Findings – Key Leader Survey

Key leaders surveyed during the CHNA process identified mental health as the top health issue impacting residents of Baltimore City. Among 33 key leaders from various organizations who responded to the survey, 66.7% identified mental health and suicide as a top community health need in Baltimore City. Multiple community resources to address behavioral and mental health were identified in this survey as being both helpful to address these concerns and insufficient to meet existing levels of community need. Key leaders described a need for more comprehensive resources or easier access to existing resources.

**Figure 4.5**

Please select the top FIVE (5) community health needs of the City of Baltimore.

n= 33



Respondents were also asked to identify the five most significant social needs in the community they serve. The need for expanded substance and alcohol use treatment was selected by 39.4% of respondents.

A lack of resources to address mental health was also noted when respondents were asked to indicate how strongly they agreed or disagreed with statements about different types of providers in the community. Nearly half (45%) of key leaders disagreed or strongly disagreed when asked to evaluate the statement “there are enough mental health providers” available in the community they serve.

### Primary Data Findings – Focus Groups

Thirty-three focus groups were conducted during the CHNA process, with more than 300 community members and other local stakeholders providing input on a variety of health and social concerns. Many of the focus groups identified mental health as being a major health concern in Baltimore City.

Focus group participants were given the opportunity to share their personal experiences surrounding mental health. For example, one focus group featured clients at a center that serves women and children needing temporary shelter assistance. Participants within this focus group shared that the biggest health need for them was access to mental health services. These community members described being unable to seek mental health care due to a lack of insurance, or a lack of trust that providers would listen to their concerns due to previous history of addiction. Participants within this group recommended that mental health in the community could be improved by reducing and removing stigma related to mental health, promoting equity, and increasing access to mental health services.

A lack of mental health services available to those experiencing homelessness or living in temporary housing was a common theme across the focus groups. In addition, many groups cited a need for reduced stigma around mental health conditions and seeking treatment when needed, noting that this was a particular challenge for some communities, such as African American community members. Some focus groups recommended that providers treat mental and physical health conditions as complementary to each other, rather than treating them separately.

### **Priority Need: Chronic Health Conditions**

#### Context and National Perspective

Chronic health conditions are illnesses that affect a person for one year or longer, and may require ongoing medical care or limit one’s ability to live their daily life.<sup>15</sup> As society has changed and people live longer, chronic health conditions have become more common than communicable diseases like typhoid and cholera. According to the WHO, chronic diseases are influenced by a combination of genetic, environmental, psychological, or behavioral factors.<sup>16</sup> Chronic health conditions are extremely common in the United States, with 6 in 10 Americans living with at least one chronic disease, such as diabetes, obesity, cancer, hypertension, heart disease, autoimmune conditions like lupus, arthritis and some forms of dementia.<sup>17</sup>

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<sup>15</sup> Source: CDC (2022). *About Chronic Diseases*. Retrieved March 7<sup>th</sup>, 2024, from: <https://www.cdc.gov/chronicdisease/about/index.htm>.

<sup>16</sup> Source: World Health Organization (WHO) (2023). *Noncommunicable diseases*. Retrieved January 23<sup>rd</sup>, 2024, from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

<sup>17</sup> Source: CDC (2024). *National Center for Chronic Disease Prevention and Health Promotion*. Retrieved January 23, 2024, from: <https://www.cdc.gov/chronicdisease/index.htm>.

Chronic diseases are the leading cause of death and disability in the United States. According to the WHO, chronic health conditions kill 41 million people globally each year and are responsible for 7 in 10 deaths in the U.S. annually.<sup>16</sup> The number of individuals living with a chronic health condition is expected to increase, particularly as the U.S. population continues to age. The population over the age of 50 is expected to increase by 61% to 221.1 million people by 2050.<sup>18</sup> Among those 221 million, nearly two-thirds (142.7 million people) are expected to have at least one chronic health condition, with approximately 15 million people living with multiple chronic health conditions.<sup>18</sup>

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells that can result in death if not treated. While the risk of dying from cancer has declined significantly over the past 30 years, it remains the second most common cause of death in the U.S. Incidence of new cancer cases has continued to rise, with 2 million new cases expected to be identified in 2024.<sup>19</sup> This trend is largely affected by the aging and growth of the population and by a rise in diagnoses of 6 of the 10 most common cancers—breast, prostate, endometrial, pancreatic, kidney, and melanoma. Some research has attributed this rise to the impact of the obesity epidemic.<sup>19</sup> Cigarette smoking is another significant risk factor for cancer, and is responsible for about 20% of all cancers and 30% of cancer deaths in the U.S. each year.<sup>20</sup>

The WHO defines overweight and obesity as abnormal or excessive fat that accumulates on the body and presents risks to a person’s health.<sup>16</sup> Obesity is one of the fastest rising chronic conditions in the United States. According to the CDC, the U.S. obesity prevalence rate for obesity between 2017-2020 was 41.9%. This represents a significant increase from 30.5% reported in 2000.<sup>21</sup> Obesity is often a factor in other chronic health conditions, such as diabetes, heart disease, strokes and in some types of cancer.

The CDC recommends four ways to prevent chronic conditions and maintain good physical health, including not smoking, eating low-fat whole food diets, exercising moderately for at least 150 minutes a week, and limiting alcohol consumption.<sup>22</sup> Annual physicals with a primary care provider are also necessary to help prevent or treat chronic health conditions. Yearly screenings can allow providers to identify any warning signs for developing conditions and enable patients to correct or develop healthy behaviors to avoid developing a physical health condition. A CDC study noted that one-third of visits to health centers in 2020 were for preventive care.<sup>23</sup> For those living with chronic conditions, the CDC recommends some general steps people can take to manage their diseases. These include taking medications as prescribed by a provider, self-monitoring symptoms as needed (such as conducting home blood sugar checks), and regularly seeing a provider for check-ups.

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<sup>18</sup> Source: Ansah, J.P. & Chiu, T.C., (2022). Projecting the chronic disease burden among the adult population in the United States using a multi-state population model. *Frontiers in Public Health*. Retrieved January 23, 2024, from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9881650/>.

<sup>19</sup> Source: American Cancer Society (ACS) (2024). *ACS Fast & Figures 2024*. Retrieved January 24<sup>th</sup>, 2024, from <https://www.cancer.org/research/acs-research-news/facts-and-figures-2024.html>.

<sup>20</sup> ACS (2020). *Health Risks of Smoking Tobacco*. Retrieved March 7<sup>th</sup>, 2024 from <https://www.cancer.org/cancer/risk-prevention/tobacco/health-risks-of-tobacco/health-risks-of-smoking-tobacco.html>

<sup>21</sup> Source: CDC (2022). *Adult Obesity Facts*. Retrieved January 23<sup>rd</sup>, 2024, from <https://www.cdc.gov/obesity/data/adult.html>.

<sup>22</sup> Source: CDC (2023). *Top 4 tips to Prevent Chronic Diseases*. Retrieved January 31, 2024, from: <https://www.cdc.gov/chronicdisease/about/top-four-tips/index.htm>.

<sup>23</sup> CDC (2022). *Characteristics of visits to health centers: United States, 2020*. Retrieved January 31, 2024, from <https://www.cdc.gov/nchs/products/databriefs/db438.htm>.

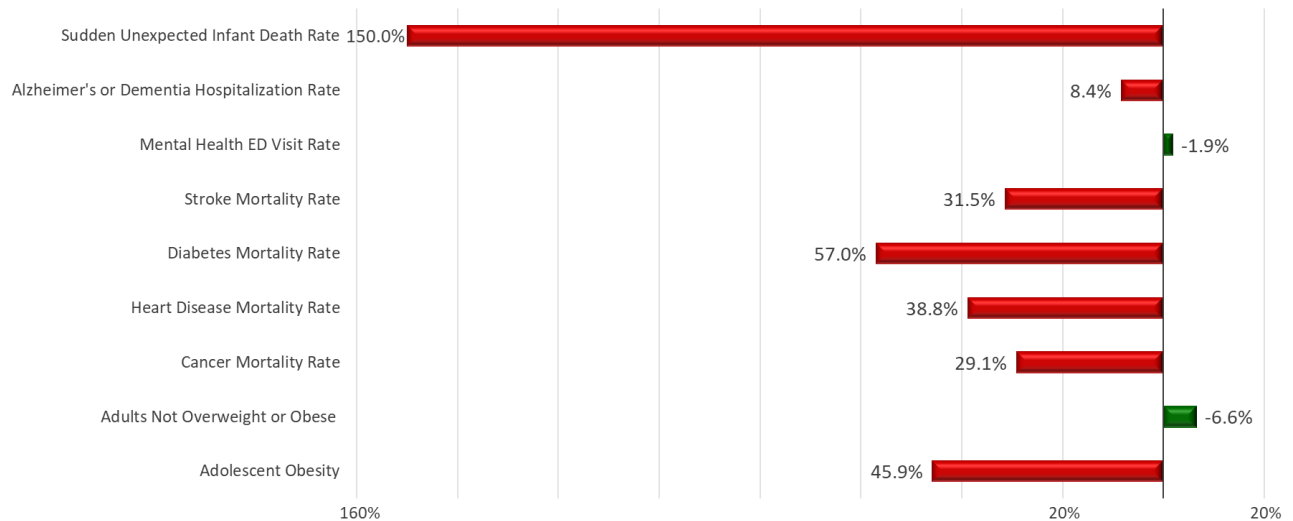
## Secondary Data Findings

Baltimore City performed worse than the state of Maryland in nearly all physical health indicators, as shown in Table 4.2. This includes a higher percentage of residents experiencing frequent physical distress, or self-reporting poor or fair health status. Baltimore City also had a higher prevalence of both diabetes and obesity among adults when compared to the state.

Indicator	Baltimore City	Baltimore County	Maryland	United States
Percentage of Population Experiencing Frequent Physical Distress	10%	8%	7%	9%
Number of Poor Physical Health Days in the Last 30 Days	3.3	2.5	2.5	3
Percentage of Population Reporting Poor or Fair Health	17%	12%	11%	12%
Percent of Population Reporting Insufficient Sleep	40%	34%	34%	33%
Adult Diabetes Prevalence	13%	9%	9%	9%
Adult Obesity Prevalence	37%	32%	31%	32%

When compared to the state overall, Baltimore City had measurably worse rates of hospitalization for Alzheimer’s disease or other dementias, as well as higher rates of mortality due to stroke, heart disease and cancer. Most notably, the rate of sudden unexpected infant deaths in Baltimore City was more than 1.5 times higher than the rate in the state overall.

**Figure 4.6: Physical Health Indicators: Variance from State**



Baltimore City also underperformed relative to the state in a number of health behaviors that have an impact on physical health. Baltimore City residents had higher rates of physical inactivity and smoking –

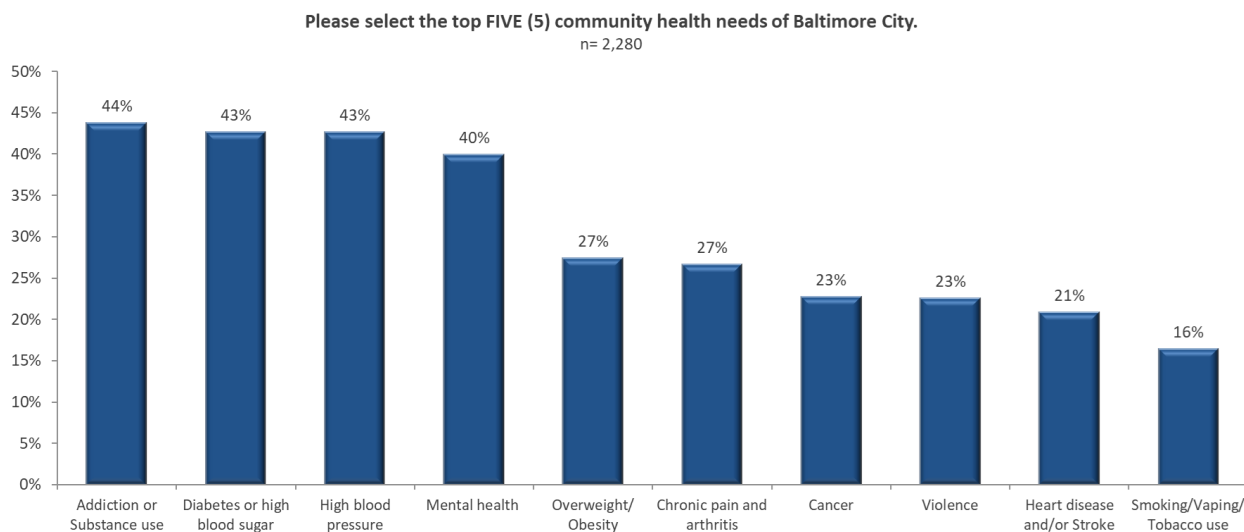
both of which have been shown to increase the risk of various chronic health conditions. Food insecurity was also a concern for Baltimore City residents, which is notable due to the impact diet has on overall physical health.

Indicator	Baltimore City	Baltimore County	Maryland	United States
Percent of Physically Inactive Adults	25%	22%	21%	22%
Percent of Adult Smokers	19%	14%	11%	16%
Percent of Population Experiencing Food Insecurity	16%	10%	9%	12%
Percent with Limited Access to Healthy Foods	2%	4%	4%	6%
Percent of Children Eligible for Free or Reduced Lunch	66%	52%	45%	53%

**Primary Data Findings – Community Member Survey**

Community members who responded to the survey identified several chronic conditions among the top community health needs in Baltimore City. Diabetes and high blood sugar were identified as the second highest need alongside high blood pressure, having each been selected by 43% of respondents. Other chronic health conditions ranked among the top health needs included obesity (27%), chronic pain and arthritis (27%), cancer (23%), and heart disease and/or stroke (21%). In addition, 16% of respondents identified smoking or tobacco use as a primary concern, which is of note due to the significant health impacts that can result from tobacco exposure. In addition, nearly one in five respondents reported experiencing poor physical health on six or more days in the prior 30-day period.

**Figure 4.7**

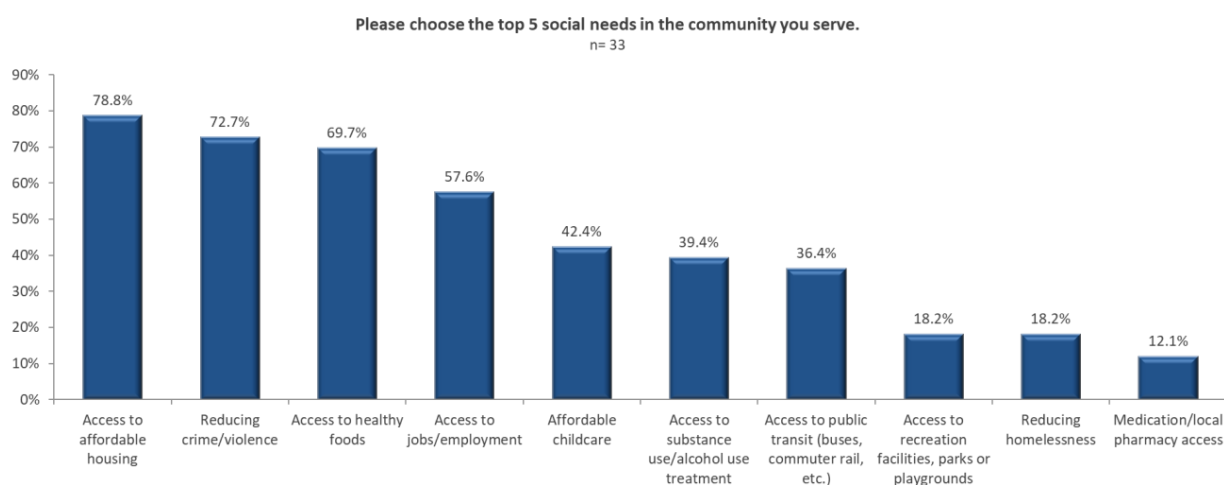


## Primary Data Findings – Key Leader Survey

Among respondents to the key leader survey, approximately 24% identified diabetes and 15% identified heart disease, stroke or hypertension among the five most pressing health needs in Baltimore City. The need for primary and preventive healthcare, which helps to prevent or manage chronic disease, was identified as a top need by 21.2% of respondents. For additional information on these health needs, please refer to Figure 4.6 in the Mental Health primary data findings.

Key leaders also identified key SDoH factors that can impact chronic diseases and overall well-being among the most pressing social needs, including access to healthy foods (69.7%), access to recreation facilities, parks or playgrounds (18.2%) and access to medications or local pharmacies (12.1%).

**Figure 4.8**



In addition, more than half of Baltimore City key leaders (57%) indicated that there were not enough outdoor places for residents to get physical activity, and two-thirds of key leaders (66%) felt that children did not have enough opportunities to play and socialize outside of school.

## Primary Data Findings – Focus Groups

When asked to identify the most significant health issues impacting their community, focus group participants noted several chronic conditions as being particularly impactful. These included diabetes, stroke, high blood pressure, chronic kidney disease, asthma, and autoimmune disorders like lupus.

One significant theme identified during the focus groups was the need for more community-facing education about chronic health conditions and SDoH behaviors. Focus group participants expressed that health information was often confusing when presented to them in a medical setting. This was a particular concern for older adults when they did not have a loved one available to speak with their physician or help them understand their treatments or medications. Suggestions to address this concern included using community health workers to follow up with patients in their homes, or finding opportunities for hospitals or the health department to provide more health information at community events, so local residents can learn more about how to prevent or manage chronic health conditions.

## Priority Need: Access to Care

### Context and National Perspective

Access to care means patients are able to get high quality, affordable healthcare in a timely fashion to achieve the best possible health outcomes. It includes several components, including health coverage (i.e. insurance), a physical location where care is provided, the ability to receive timely care when needed, and enough providers in the workforce. The CHNA Collaborative identified access to care as a high priority need for residents of Baltimore City.

From a national perspective, according to Healthy People 2030, approximately one in ten people in the U.S. do not have health insurance, which means they are less likely to have a primary care provider or to be able to afford the services or medications they need.<sup>24</sup> Access challenges are a concern even for those who do have health insurance.<sup>25</sup>

The availability and distribution of health providers across the U.S. contributes to healthcare access challenges. According to the Association of American Medical Colleges (AAMC), there is estimated to be a shortage of 37,800 to 124,000 physicians in the U.S. by 2034, impacting both primary and specialty care.<sup>26</sup> Access issues are anticipated to increase in coming years. Growing shortages of both nurses and doctors are being driven by several factors, including population growth, the aging U.S. population requiring higher levels of care, provider burnout (physical, mental and emotional exhaustion) made worse by the COVID-19 pandemic, and a lack of clinical training programs and teachers – particularly for nurses.<sup>27</sup> The aging of the current physician workforce is also driving expected shortages. In Maryland, in 2020, 35.8% of actively practicing physicians were over the age of 60.<sup>28</sup> Access is also impacted by the overall number of practicing physicians. In 2020, there were just 7,075 primary care physicians in Maryland, with 23,791 physicians actively practicing across all specialties.<sup>28</sup>

The ability to access healthcare is not evenly distributed across groups in the population. Groups who may have trouble accessing care include the chronically ill and disabled (particularly those with mental health or substance use disorders), low-income or homeless individuals, people located in certain geographical areas (rural areas; tribal communities), members of the LGBTQIA+ community, and certain age groups – particularly the very young or the very old.<sup>29</sup> In addition, individuals with limited English proficiency (LEP)

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<sup>24</sup>Source: U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion (2023). *Healthy People 2030: Health Care Access and Quality*. Retrieved September 14<sup>th</sup>, 2023 from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality>.

<sup>25</sup> Source: Phillips, K.A., Marshall, D.A., Adler, L., Figueroa, J., Haeder, S.F., Hamad, R., Hernandez, I., Moucheraud, C., Nikpay, S. (2023). Ten health policy challenges for the next ten years. *Health Affairs Scholar*. Retrieved from: <https://academic.oup.com/healthaffairsscholar/article/1/1/qxad010/7203673>.

<sup>26</sup> Source: Association of American Medical Colleges (AAMC) (2021). *The complexities of physician supply and demand: Projections from 2019 to 2034*. Retrieved from: <https://www.aamc.org/media/54681/download?attachment>.

<sup>27</sup> Source: University of Southern California Keck School of Medicine (2023). *A Public Health Crisis: Staffing Shortages in Health Care*. Retrieved September 14<sup>th</sup>, 2023, from <https://mphdegree.usc.edu/blog/staffing-shortages-in-health-care>.

<sup>28</sup> Source: AAMC (2021). *Maryland physician workforce profile*. Retrieved January 24, 2024, from <https://www.aamc.org/media/58211/download>

<sup>29</sup> Source: Joszt, L. (2018). 5 Vulnerable Populations in Healthcare. *American Journal of Managed Care*. Retrieved September 14<sup>th</sup>, 2023 from <https://www.ajmc.com/view/5-vulnerable-populations-in-healthcare>.

face barriers to accessing care, experience lower quality care and have worse outcomes for health concerns. LEP is known to worsen health disparities and can make challenges related to other SDoH (access to housing, employment, etc.) worse.<sup>30</sup> Both primary and secondary data resources analyzed for this report highlight the need for greater access to health services within Baltimore City.

Access to care and overall community health are affected by SDoH, which have a critical impact on health needs and outcomes. The World Health Organization defines SDoH as the non-medical factors that influence health outcomes. These are the conditions in which people are born, grow, work, live and age, and the wider set of external forces and systems shaping the conditions of daily life. Examples of SDoH that can influence health in positive or negative ways include income, education, unemployment/job security, food insecurity, housing, early childhood development, social inclusion or non-discrimination, structural conflict and access to affordable, high-quality healthcare.<sup>31</sup>

As seen in Figure 4.9, the American Hospital Association categorizes SDoH factors into the following domains: food, housing, transportation, health behaviors, violence, education, social support and employment.

**Figure 4.9: Social Determinants of Health**



Source: American Hospital Association

SDoH are not experienced equally by all people and are often linked to one another. The impacts of SDoH on populations are profound, can persist across generations, and often drive health inequities based on race, ethnicity or socioeconomic status. When health systems use their resources to address SDoH among patient populations, it can strengthen the quality of the care they provide while reducing health inequities.<sup>32</sup> Evidence-based SDoH programs that can be adopted by hospitals or health systems that may reduce healthcare costs and improve outcomes include supportive housing for individuals with chronic health conditions, food and nutrition access, patient transportation services, cash payment or income

<sup>30</sup> Source: Espinoza, J. and Derrington, S. (2021). How Should Clinicians Respond to Language Barriers That Exacerbate Health Inequity? *AMA Journal of Ethics*. Retrieved from: <https://journalofethics.ama-assn.org/article/how-should-clinicians-respond-language-barriers-exacerbate-health-inequity/2021-02>.

<sup>31</sup> Source: WHO (2023). *Social Determinants of Health*. Retrieved September 14<sup>th</sup>, 2023, from [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1).

<sup>32</sup> Source: American Medical Association (2022). *What are social determinants of health?* Retrieved September 14<sup>th</sup>, 2023, from <https://www.ama-assn.org/delivering-care/health-equity/what-are-social-determinants-health>.

support for individuals with disabilities, and multidisciplinary patient care coordination teams.<sup>33</sup> Research published in JAMA suggests that collecting patient data on social adversity and health-related social needs can not only be used to develop better trust and support for their patients but can also help identify broader social needs in the community.<sup>34</sup>

Throughout the primary and secondary data findings below, various SDoH emerged as areas of priority need for Baltimore City. Specifically, based on these findings, key concerns include dynamics related to food insecurity, violence and neighborhood safety, affordable housing, and transportation. City health leaders will continue to evaluate their potential to play a role in impacting these domains in the years to come.

Secondary Data Findings

Various factors contribute to healthcare access, not all of which were determined to be of high need for Baltimore City, as detailed in Appendix 4. Relative to the state of Maryland and the U.S., Baltimore City performs well on a number of access to care metrics, including the ratios of population to primary care physicians, non-physician primary care providers, dentists and mental health providers. This is likely due to the multiple large health systems and academic medical centers that operate in and around Baltimore City, which means there are a significant number of physicians and other health providers operating in the community. However, due to various healthcare-related challenges such as transportation access and clinic hours, those who are under resourced may still experience barriers to receiving appropriate care.

**Table 4.4: Social Determinants of Health: Access to Care Indicators**

Indicator	Baltimore City	Baltimore County	Maryland	United States
Percentage of Population Uninsured	6%	6%	7%	10%
Total Population per Primary Care Physician	800	1,100	1,130	1,310
Total Population per Non-Physician Primary Care Provider	320	770	770	810
Total Population per Dentist	1,210	1,300	1,260	1,380
Total Population per Mental Health Provider	170	260	310	340

As previously described in the Context and National Perspective section above, SDoH have an impact on individual health status, and many SDoH factors can influence a person’s ability to access healthcare. While access to care metrics in Baltimore City are largely positive, the city performed worse across many SDoH metrics, suggesting a need to address these factors that influence health and well-being in the

<sup>33</sup> Source: Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R. & Sommers, B. (2022). *Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts*. Retrieved from <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf>.

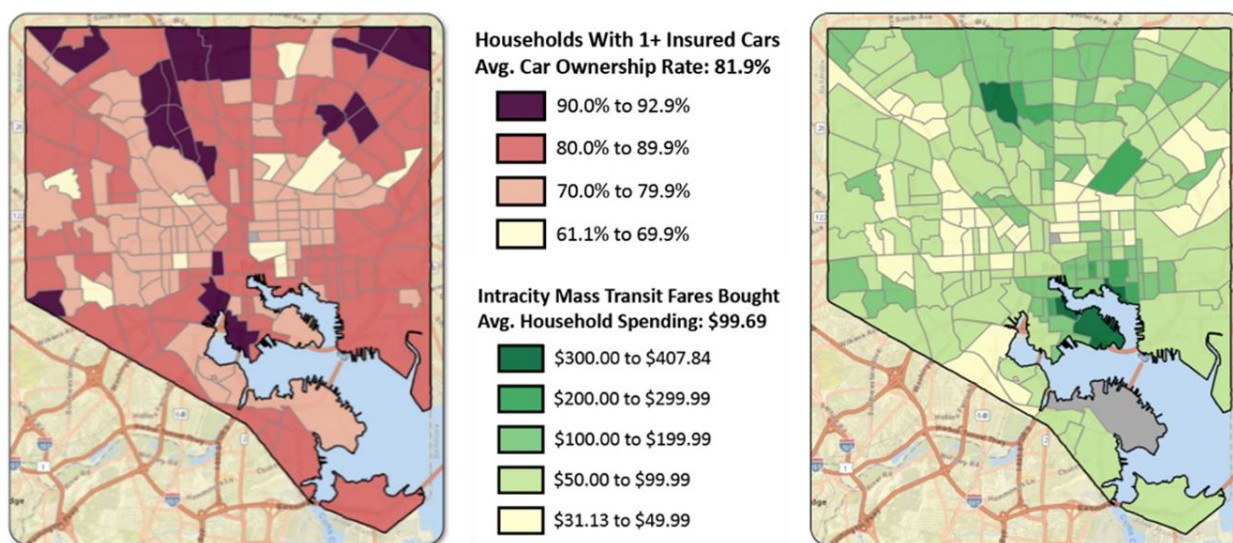
<sup>34</sup> Chen, A., Gwynn, K. & Schmidt, S. (2023). Addressing health-related social needs in the clinical, community, and policy domains. *JAMA Network*. Retrieved January 31, 2024 from: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2804105>.

community. Built environment and food security indicators fell below county, state, and national benchmarks, with the exception of healthy food access and access to exercise opportunities. The most significant difference was the percentage of children who are eligible for free or reduced lunch, which was more than 20% higher in Baltimore City (66%), than the state of Maryland (45%).

Table 4.5: Social Determinants of Health: Built Environment and Food Insecurity Indicators				
Indicator	Baltimore City	Baltimore County	Maryland	United States
Food Environment Index Score	7.5	8.3	8.7	7
Percentage of Population with Access to Exercise Opportunities	99%	97%	92%	84%
Percentage of Population with Broadband Internet Access	80%	89%	90%	87%
Percentage of Population Experiencing Food Insecurity	16%	10%	9%	12%
Percentage of Population with Limited Access to Healthy Foods	2%	4%	4%	6%
Percentage of Children Eligible for Free or Reduced-Price Lunch	66%	52%	45%	53%

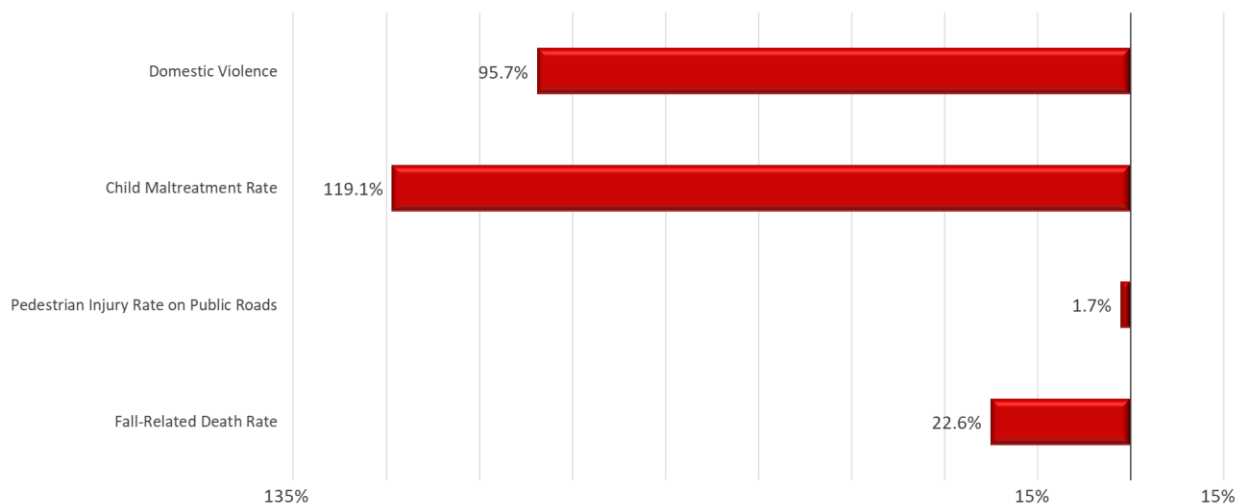
Transportation was another category of focus for Baltimore City, due to the impact it has on patients' ability to access medical care. While more than three-quarters of Baltimore City households own at least one car (81%), car ownership rates were lower in the central areas of the city. This coincides with areas that have higher usage of public transit, as shown in Figure 4.10. Baltimore City residents who rely on mass transportation to get around may be limited as to where they can seek care based on where bus or other transit lines are available.

**Figure 4.10: Percentage of Car Ownership and Amount of Mass Transit Spending**



Neighborhood violence and safety was another SDoH indicator of concern to the Collaborative. Baltimore City’s rates of domestic violence are nearly double (95%) the rate in the state and child maltreatment approximately 120% worse than the state of Maryland overall.

**Figure 4.11: Public Safety Indicators – Variance from State**



Nearly all local safety indicators were significantly worse in Baltimore City compared to the state, with exceptions for deaths from vehicle accidents, and juvenile arrests. The rate of deaths attributed to injuries was more than double the state rate, and nearly double that of Baltimore County. Most notably, firearm-related fatalities in Baltimore City were nearly four times the rate in the county, the state or the U.S. overall. Violence and concerns about safety in the community have an impact on community members’ ability to safely move about in their community, whether for personal reasons like exercise or to seek medical care when needed. High levels of community violence are also linked to poor mental health among community members.

Table 4.6: Social Determinants of Health: Neighborhood Safety and Violence Indicators				
Indicator	Baltimore City	Baltimore County	Maryland	United States
Injury Mortality (per 100,000 population)	200	109	88	76
Homicides (per 100,000 population)	43	9	9	6
Firearm Fatalities (per 100,000 population)	44	13	12	12
Motor Vehicle Crash Deaths (per 100,000 population)	9	8	9	12
Juvenile Arrests per 1,000 Juveniles	25	39	27	24

Housing (including homelessness) was also identified as a primary SDoH concern that may impact access to healthcare. More than 20% of Baltimore City residents experience severe housing problems, defined as the percentage of homes that have at least one of four significant housing problems: overcrowding,

high housing costs, lack of kitchen facilities, or a lack of plumbing facilities.<sup>35</sup> In addition, one in five Baltimore City residents spends more than half their monthly income on housing, which may significantly impact their ability to pay for prescriptions, medical bills or other associated healthcare costs. Less than half of housing units in the city were occupied by homeowners (48%), a lower rate than Baltimore County, the state or the U.S.

<b>Indicator</b>	<b>Baltimore City</b>	<b>Baltimore County</b>	<b>Maryland</b>	<b>United States</b>
Percentage of Households with Severe Housing Problems	21%	15%	16%	17%
Percentage of Owner-Occupied Housing	48%	66%	67%	65%
Percent of Renters with Severe Housing Cost Burden	20%	14%	14%	14%
Percentage of Sold Housing Units Considered Affordable	91.9%	64.1%	56.7%	NA

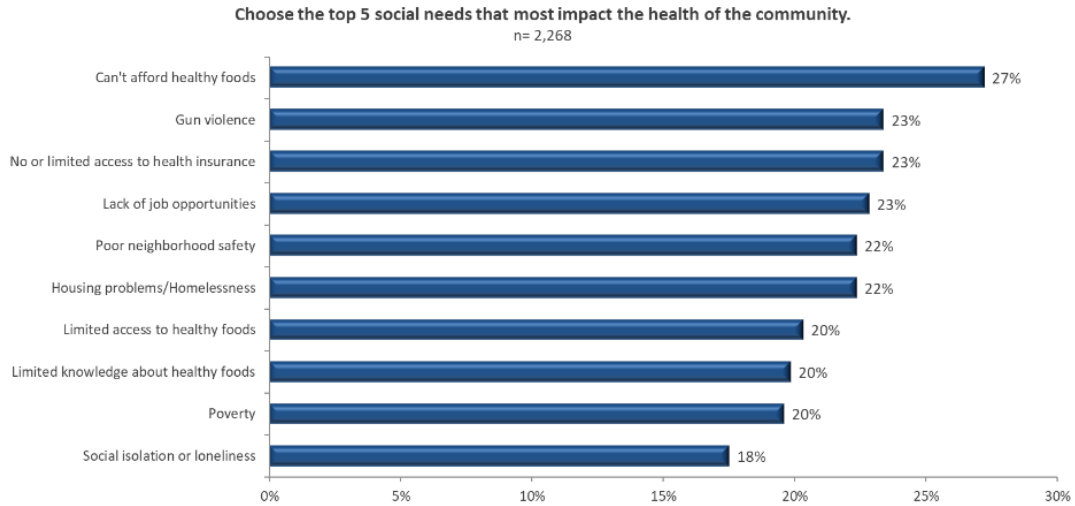
Primary Data Findings – Community Member Survey

Nearly all community survey respondents (86.9%) identified that they currently have health insurance. However, among those who did not, two-thirds of respondents described a lack in confidence in knowing how to obtain coverage.

Similar concerns were reflected when community members were asked to identify the top five social needs in the community. Nearly a quarter (23%) of respondents cited no or limited access to health insurance as having a major impact on community health. Several SDoH needs identified by survey respondents aligned with secondary data findings, and may impact community members’ ability to access healthcare or live healthy lives. The inability to afford healthy food was identified as the top social need by 27% of respondents. Gun violence (23%) and neighborhood safety (22%) were identified by nearly a quarter of the respondents as well.

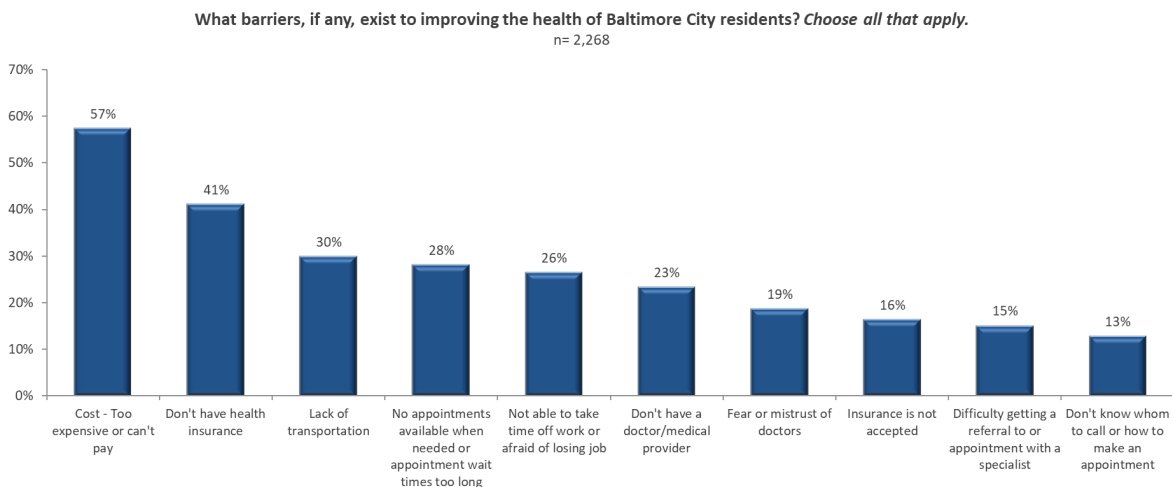
<sup>35</sup> Source: County Health Rankings (2023). *Severe housing problems*. Retrieved February 9, 2024 from: <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/physical-environment/housing-and-transit/severe-housing-problems?year=2023>.

**Figure 4.12**



Community members were also asked to identify top barriers to improving and accessing care, as seen in Figure 4.13 below. The high cost of care (57%) and lack of health insurance (41%) were the top two identified barriers. Cost overall was highly identified in both the key leader and the community member survey as one of the top three barriers to receiving and accessing care. When breaking down responses to barriers to care further by demographic, the high cost of healthcare and concerns around obtaining insurance were consistent across race, age, and gender.

**Figure 4.13**



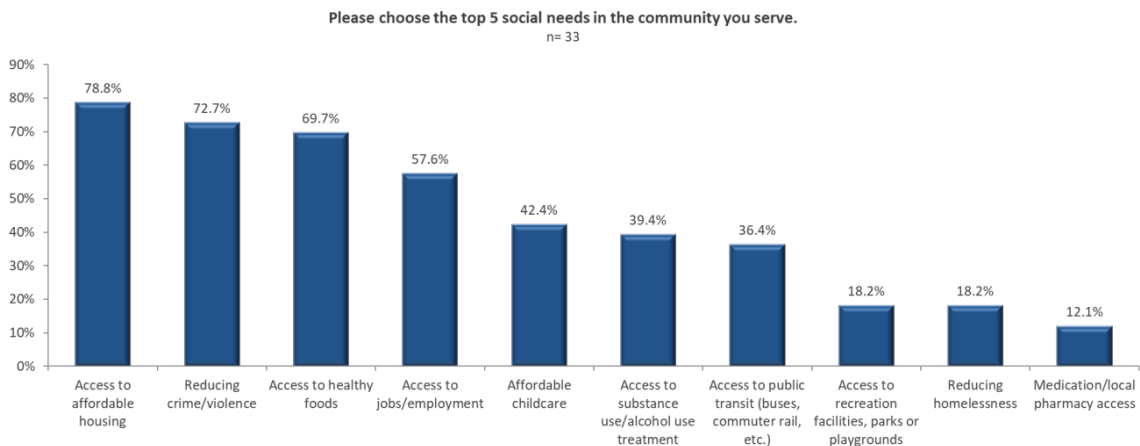
### Primary Data Findings – Key Leader Survey

Over half (51.5%) of respondents to the key leader survey ranked access to care among the highest priority health needs in Baltimore City, while 21.2% identified the need for primary and preventive healthcare as a top concern. Key leaders identified various SDoH needs among the top health needs of the community. Housing and homelessness was ranked as the second highest community health need, selected by 63.6% of respondents. Food security (60.6%) and gun violence prevention (54.5%) were also highlighted as top

health needs by key leaders, highlighting a growing understanding of the impact these factors have on individual and community health.

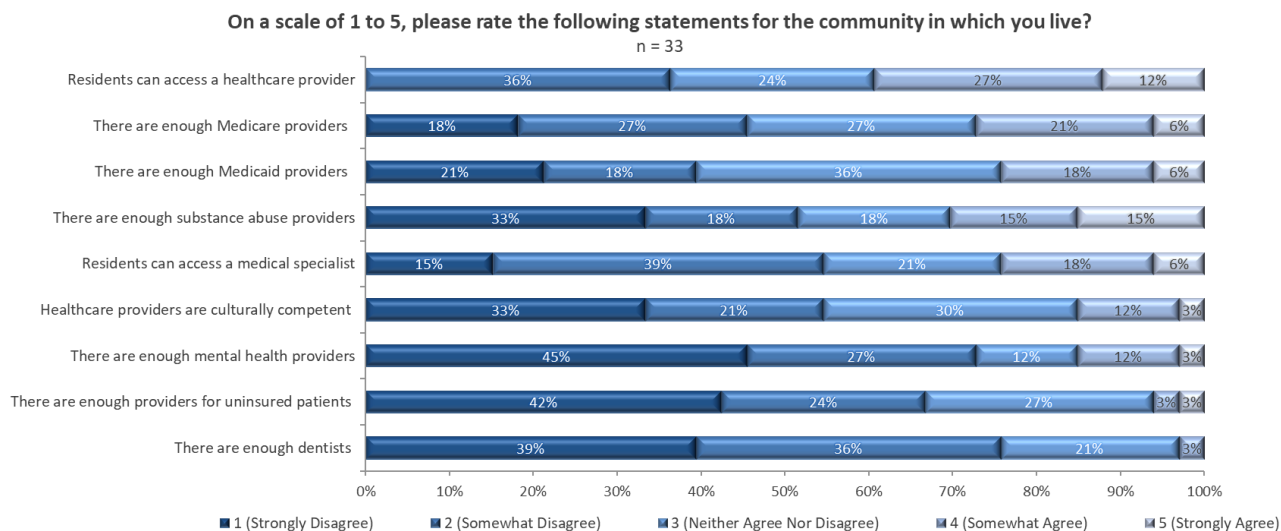
These metrics were explored further when respondents were asked to identify top social needs in the communities they serve. Access to affordable housing was identified as the top social need in the community by over two thirds of key leaders (78.8%). Reducing crime and violence followed as a close second, with 72.7% of key leaders identifying the concern. Just over a third of respondents indicated a need for access to public transit as well.

**Figure 4.14**



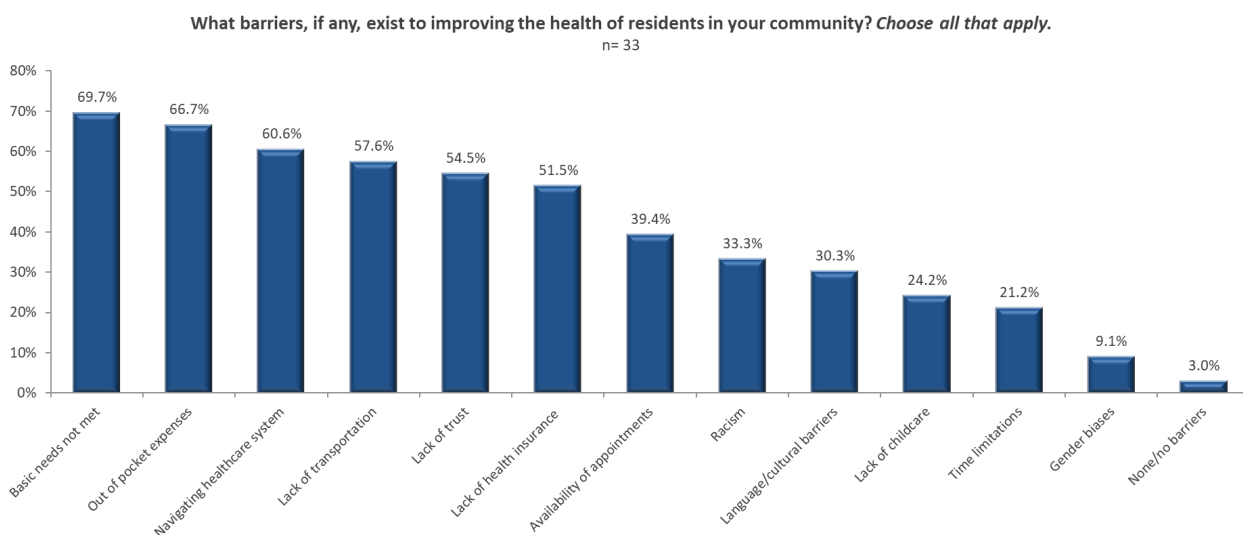
The majority of respondents (60%) disagreed that residents could access any type of healthcare provider when needed. In addition, more than half (54%) of respondents disagreed that residents could access specialty care when needed. Key leaders also disagreed that there were enough providers available to meet the needs of uninsured patients (66%), Medicare patients (45%) or Medicaid patients (39%) in their communities. Over half (54%) of key leaders also felt that there were not enough culturally competent healthcare providers to meet the needs of the community.

**Figure 4.15**



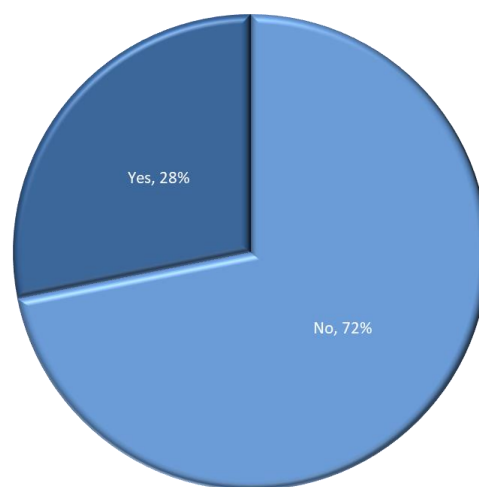
Respondents to the key leader survey were also asked to identify any barriers to improving the health of residents in their communities. Almost two thirds (69.7%) of respondents felt that their residents could not access healthcare because they did not have their basic needs met, and 66.7% felt that residents' out of pocket expenses were a significant barrier to care. Key leaders also felt that community members struggle to navigate the healthcare system, which was echoed through participant feedback in the focus groups. Lack of trust in healthcare providers was cited as a primary barrier by 54.5% of survey respondents, while many key leaders also identified racism (33.3%) and language or cultural barriers (30.3%) as impacting community members' ability to access care. Other SDOH factors were highly ranked as barriers to care, with lack of transportation (57.6%) and a lack of health insurance (51.5%) identified as top concerns as well.

**Figure 4.16**



**Figure 4.17**

Do you feel that the residents of the community you serve are health literate? n = 33

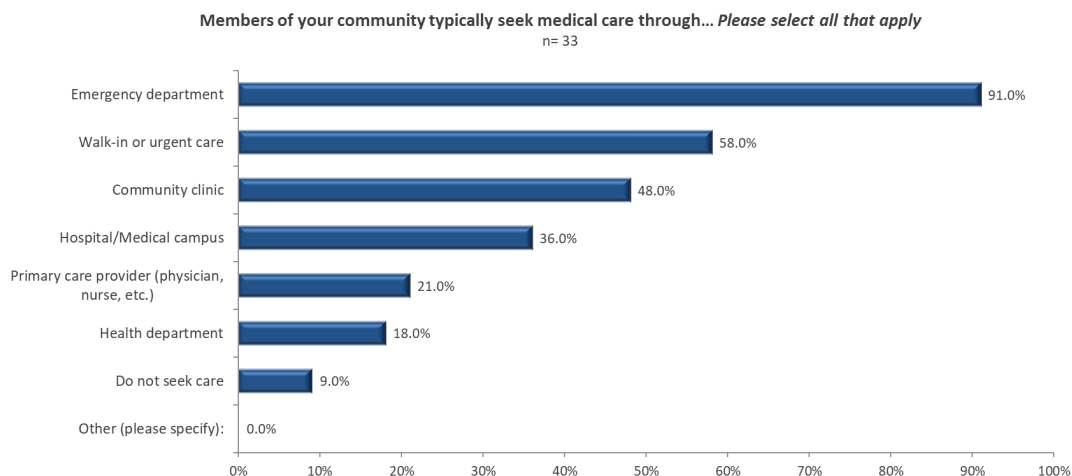


Key leaders were also asked whether they felt that the residents of the community they serve were health literate, or able to understand health-related information when it is presented to them. Almost three-quarters (72%) indicated that community members were not health literate. Key strategies for improving health literacy suggested by key leaders include using simplified language, providing LEP community members with translation services, and providing information to people where they are, such as at community events or offering home-based services.

Finally, key leaders were asked to identify the most common settings where community members seek medical care. Nearly all respondents (91%) identified the most common location for accessing care as the emergency department. The second most common was walk in/urgent care, at 58%. This aligns with community survey results that noted a lack of appointment availability and the high cost of care as

major barriers. Individuals cannot be turned away at emergency departments for care, and many low-income individuals may also not be able to see a primary care provider in a timely fashion, or may lack health insurance to access primary care in the first place.

**Figure 4.18**



### Primary Data Findings – Focus Groups

Access to care and various SDOH factors were primary concerns among participants across all focus groups. Multiple groups cited transportation, food access and quality, and community crime or violence as barriers to receiving care and incorporating healthy behaviors into their lives.

To best understand the factors impacting community health in Baltimore City, all focus group participants were asked about their perceptions of the medical services in the community, and their experiences accessing healthcare. Challenges relating to accessing care, care quality, and patient experiences were voiced frequently throughout these groups, particularly among minority community members and new immigrants to Baltimore City. The cost of care and access to health insurance were also noted as barriers in the community member and key leader surveys described earlier in this report. Focus group participants voiced concerns about their ability to pay expensive medical bills, copays or prescription costs, and overall fear of using the medical system – a particular challenge for those who are undocumented.<sup>36</sup> Other participants voiced a desire for access to free or low-cost preventative care directly in their communities, at events such as local health fairs.

Many participants described challenges related to the quality of care they received when they did need medical care. Community members described long wait times to be able to see their primary care provider or specialists when needed. Wait times were also a concern when accessing care through urgent care clinics or the emergency department. Many participants described the healthcare system overall as confusing, and this was a particularly strong sentiment when it came to understanding or accessing health insurance. Many participants described feeling mistrustful toward their providers and nurses, due to prior negative experiences with medical care. Some participants expressed frustration when seeking care, describing situations where an immediate or partial concern was addressed, but where the provider did not treat them as a whole person or set up an effective plan of care tailored to their individual needs. One

<sup>36</sup> [Undocumented persons are individuals living in the U.S. without legal immigration status.](#)

participant in a focus group featuring older adults described an experience with a local hospital emergency department, and how a lack of timely care led to them spending two days in the waiting room, only to be sent home with over-the-counter medication.

Participants also described some of their experiences with providers, which often left them feeling discriminated against based on their race, age or medical diagnosis. Many focus group participants described feeling a sense of stigma that made them feel hesitant to seek care, even when needed. Other individuals expressed concern with their providers treating them as textbook cases or numbers, rather than human beings. Health literacy among community members was also described as a concern that impacts health. Participants noted that providers should be able to describe health-related information to their patients in terms that could be easily understood. Participants with limited English proficiency also described negative experiences with translators lacking the training to properly relay health-related information.

Overall themes related to the need for greater equity and empathy by medical providers were described across many focus groups. One focus group featuring participants from a hospital-based HIV clinic described a need for increased provider sensitivity training, community forums and additional opportunities for communication between clinical staff and the community as a way to build trust. Perception of medical services within this group in particular was not positive; many participants described a lack accountability from their providers, feeling stigmatized due to their HIV-positive status and frustration around difficulty accessing resources or services due to restrictive income thresholds. Other focus groups, especially those focused on new parents, cited specific concerns related to racial profiling, financial stress during the postpartum period, and an overall need for support in family planning and during medical crisis situations.

Focus group participants also noted several SDoH challenges that directly impact their ability to access healthcare and live healthy lives. Transportation was a key factor that impacts access. Many residents described being reliant on city buses or mobility transportation services; however, these were inconvenient and, often, dangerous. The high cost of healthy food was also described as a driver of poor health in the community, as well as an important basic need that may force people to make difficult choices between paying for food or paying for prescriptions or medical care. Similarly, the high cost of housing was noted as a basic need that often forces people to cut health-related costs in order to keep a roof over their heads. Older adults, in particular, noted that many seniors live in unsafe housing conditions because they cannot afford to move or to install safety equipment in their homes. Finally, many community members who participated in the focus groups described community violence as a significant challenge that impacts community members' ability to walk or exercise outdoors, and as a contributor to high levels of stress that impact overall health and well-being.

Baltimore City is home to a wide array of programs and services that may be used to address community health and many of the needs identified throughout this report. Please note that while the city overall may be adequately served by existing capacity in some areas, not every area of the city is equally served, and the need for additional resources may be greater in one geography as compared to another.

As multiple resources are available and are constantly changing, electronic databases are utilized to locate resources which best meet the needs of Baltimore City community members. The databases are maintained with current information, contact sources, descriptions, directions and, in some cases, applications and referral follow-up capability. To ensure that these resources are readily available to meet community needs, some facilities have embedded these databases directly into their websites and/or electronic medical record platforms.

Select citywide resource databases are described here:

- [211 Maryland](#) is the state's most comprehensive health and human services resource database. With more than 7,500 resources, individuals with essential needs can get connected to local help 24/7/365. In Baltimore, specifically, 211 Maryland provides direct assistance for community members in need of water bill assistance, utility assistance, access to free or reduced cost food, housing navigation, financial support, tax preparation and more.
- [CHARMCare](#) is a service of BCHD and its partners, which was developed through the Accountable Communities project – a citywide program that aims to connect patients to resources for social needs. CHARMCare is a free online resource guide where community members can find free or reduced-cost programs and services in Baltimore City to help meet their needs. The directory has information for resources that can help with food, housing, transportation, utilities, employment, education, mental healthcare, and substance use care.
- [FindHelp](#) is a web-based platform that helps health plan case managers connect their members with local services. It can also help participating organizations track social care outcomes. Through FindHelp, community members can be connected with free or reduced-cost resources in Baltimore City, including food, housing, financial assistance, healthcare, and more.

## CHAPTER 5 | NEXT STEPS

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The CHNA findings are used to develop effective community health improvement strategies to address the priority needs identified throughout the process. The next and final step in the CHNA process is to develop community-based health improvement strategies and action plans to address the priorities identified in this assessment. The organizations making up the Collaborative will leverage information from this CHNA to develop implementation and action plans for their local community, while also working together with other members of the Collaborative to ensure the priority need areas are being addressed in the most efficient and effective way. The Collaborative believes that the most effective strategies will be those that have the collaborative support of community organizations and residents. The strategies developed will include measurable objectives through which progress can be measured.



## APPENDIX 1 | EVALUATION OF PRIOR CHNA IMPLEMENTATION PLANS

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A CHNA is an ongoing process that begins with an evaluation of the previous CHNA. In 2017, the BCHD, in partnership with the Local Health Improvement Coalition (LHIC), completed its previous assessment. In compliance with IRS regulations for not-for-profit hospitals, individual members of the CHNA Collaborative have completed their own CHNAs more recently (primarily in 2021). While members of the Collaborative have coordinated on various data gathering efforts in the past, the present CHNA is the first time Baltimore City health leaders have developed a unified assessment of the City's health and social needs.

Below are brief summaries of the findings of and implementation plans for each organization's CHNA between 2017 and the writing of this report. Each organization developed their goals and implementation plans separately and may also have identified additional priorities that are specific to the populations served by their facilities.

### **Ascension St. Agnes Hospital**

ASA is a member of Ascension Health – one of the nation's leading not-for-profit and Catholic health systems. St. Agnes published its FY 2021 CHNA after conducting a large-scale community survey; facilitating seventeen focus groups with leaders and members of community organizations, neighborhood associations, and faith-based organizations; conducting eight additional online focus groups with community leaders, local public health experts, and community members; engaging Conduent Healthy Communities Institute to provide local community health indicator data; examining its internal hospital utilization data; and analyzing demographic and other maps provided by BCHD.

ASA's CHNA ultimately identified the following three stated community health need priorities to be addressed in the FY 2021–2024 cycle: address mental health and substance use disorders (SUD), prevent diabetes and improve health, and build person-centered healthy neighborhoods to address social determinants of health (SDoH). Among the most significant health and SDoH needs were found to be SUDs; mental health; chronic disease, including diabetes and heart disease; economic opportunity; affordable housing and safe neighborhoods; affordable healthcare; and transportation.

Programs implemented to address mental health and SUDs included assessment and referrals for ASA patients as needed, increasing patient access to medication assisted treatment, increasing mental health visits in the Ascension Medical Group and Health Institute programs, conducting naloxone trainings on campus and throughout the community, and providing trauma-informed care trainings for ASA staff. Diabetes-specific programs included expanding the Food Rx program to meet the nutritional needs of patients with diabetes or prediabetes, expanding the ASA Diabetes Prevention Program (DPP), developing an ASA care pathway for diabetes care management, increasing care management services for primary care patients with diabetes, and continuing to offer the Diabetes in Pregnancy program to provide nutrition therapy, health education, and monitoring for pregnant women with or at risk for diabetes. To address SDoH in the community, ASA established violence prevention programming for patients with violent injuries, provided health services in the community to help meet local neighborhood needs, grew the volunteer chaperoned ride program to reduce transportation barriers to accessing healthcare, expanded access to technology infrastructure for individuals to access telehealth, and connected patients to community resources that address SDoH.

## **Baltimore City Health Department**

The Baltimore City Health Department was founded in 1793 and is the oldest continuously operating health department in the United States. BCHD has a wide-ranging area of responsibility, including acute communicable diseases, animal control, chronic disease prevention, emergency preparedness, HIV/STD, maternal-child health, restaurant inspections, school health, senior services, and youth and trauma services.

BCHD published its last CHNA in 2017 in partnership with the LHIC, a body comprised of community members and key stakeholders from various local healthcare systems, community-based organizations, faith-based institutions, businesses, and foundations that aims to improve health outcomes throughout Baltimore City. The 2017 Baltimore City CHNA focused on demographics, education, socioeconomic, housing, safety, food, and various health outcomes and health behaviors, such as maternal and child health, mortality and illnesses, and health behaviors. Some key findings and points of consideration focused on racial and economic health disparities, systemic discrimination, a crude mortality rate 30% higher than the rest of Maryland, and a staggering 20-year difference in life expectancy between city regions ranking highest in life expectancy to those ranking lowest.

To address needs identified in its 2017 CHNA, BCHD continued to support a variety of programs and services. Examples of those programs included continuation of Naloxone education and training for city residents and support of hospital-based substance use disorder related services. Chronic disease-focused programs such as tobacco cessation, lead poisoning prevention, food access programs such as Virtual Supermarket sites, continued to grow and reach city residents. To foster and maintain community outreach, BCHD continued to nurture its partnership with Healthcare Access Maryland to expand the use of community health workers throughout its programs. Currently, through the work of the LHIC, diabetes, care coordination and social determinants of health are being addressed through monthly convenings and community member engagement.

## **Johns Hopkins Health System (Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center)**

The Johns Hopkins Hospital (JHH) is the teaching hospital and biomedical research facility of Johns Hopkins School of Medicine in Baltimore City, and Johns Hopkins Bayview Medical Center (JHBMC) is home to the teaching hospital's trauma center, neonatal intensive care unit, geriatrics center and the Johns Hopkins Burn Center – the only adult burn trauma unit in the state of Maryland. The CHNA process for JHH and JHBMC included the collection and analysis of primary and secondary data. Both public and private organizations, such as faith-based organizations, government agencies, educational systems, and health and human services entities were engaged to assess the needs of the community. In total, the extensive primary data collection phase resulted in more than 1,700 responses from community stakeholders/leaders and community residents.

The JHH/JHBMC FY2021 CHNA Implementation Strategy addresses community identified direct health needs and SDoH areas including mental health, substance use, diabetes, cardiovascular disease, chronic disease management and health education, access to care and support, housing, neighborhood safety, job opportunities, and healthy food environment. Although the COVID-19 pandemic provided new challenges to in-person community programming, JHH and JHBMC continued to address the identified needs through over 250 community benefit activities including quickly transitioning a paid summer student intern program to a virtual platform for the summer 2020 session to avoid cancelling during the COVID lock down which would result in a loss of income for over 300 Baltimore students. Other JHH and

JHBMC Programs that addressed community needs identified in the 2021 CHNA included, but was not limited to, comprehensive SDoH screenings, a food access program providing over a million meals to East Baltimore residents over the past three years, the launch of a new violence intervention program, a housing project with other Baltimore hospitals and public and private city partners to provide housing and wrap around services to homeless persons or those at risk of becoming homeless, and supporting a longtime supportive housing organization partner by providing over 18,000 bed nights to 280 individuals in treatment for substance use. JHH and JHBMC continue to support and collaborate with over 100 community organizations to deliver direct health services to community members based on the CHNA identified needs.

### **LifeBridge Health: Levindale Hospital**

Levindale is a 330 licensed-bed facility located in Baltimore that offers a full continuum of post-acute services to help patients regain function and vitality after a life-altering illness or injury. Levindale Hospital's 2021-2024 implementation plan addressed the following priority areas: chronic heart disease, diabetes, mental health and substance use disorder, community health and wellness education, housing, food insecurity, community safety, and health disparities.

To address these issues, Levindale patients and family members had access to virtual and in-person chronic disease management education classes, the hospital's service area benefited from implementation of Mobile Health Clinics in surrounding neighborhoods, had access to Sinai Hospital of Baltimore's vocational services and workforce readiness program (VSP) for training and workforce development services, and created new partnerships and strengthened existing ones with community based organizations to improve access and trust for patients needing medical and behavioral health services.

Some examples of programs and services implemented by Levindale Hospital include:

- *Provided Adult Housing for displaced adults:* Levindale Hospital housed adults from Sinai and other hospitals who no longer require an acute hospital stay but have nowhere else to be discharged to.
- *Dedicated Social Work Support:* Provided dedicated social work support to assist housed community patients with placement.

### **LifeBridge Health: Sinai Hospital and Grace Medical Center**

For more than 150 years, Sinai Hospital has been committed to the principles of inclusion, innovation and caring for the whole person. With 483 beds, Sinai is the largest community hospital in Maryland. Grace Medical Center, formerly Bon Secours Hospital, has provided healthcare services to the West Baltimore community for more than 100 years.

Sinai Hospital's 2021-2024 implementation plan addressed the following priority areas: chronic heart disease, diabetes, mental health and substance use disorder, community health and wellness education, housing, food insecurity, community safety, and health disparities. To address these respective issues, LifeBridge and Sinai Hospital and Grace Medical Center staff implemented virtual and in-person chronic disease management education classes, increased staff to expand reach into surrounding communities, operated Mobile Health Clinics in surrounding neighborhoods, utilized Sinai Hospital of Baltimore's VSP for training and workforce development services, and created new partnerships and strengthened existing

ones with community based organizations--including with local faith-based organizations--to improve access and trust for patients needing medical and behavioral health services.

Some examples of programs and services implemented in the Sinai Hospital and Grace Medical Center service area include:

- *Diabetes Medical Home Extender Program*: Provides comprehensive care coordination for patients with chronically unmanaged diabetes and help resolve psychosocial barriers preventing patients from utilizing primary care. Ensure patients have appropriate medications, transportation, and home support services. In FY23, the program had 2,524 encounters.
- *Diabetes Education and Healthy Food Support*: Provided in five high-priority West Baltimore zip codes. Free home delivery of fruits and vegetables for food insecure people with diabetes in West Baltimore. This program has provided access to healthy food for more than 360 participants to date.
- *SBIRT (Screening, Brief Intervention, and Referral to Treatment) Program*: Peer recovery coaches stationed in the hospitals' Emergency Departments connect substance use disorder patients with treatment and community resources. In FY23, Sinai Hospital and Grace Medical Centers provided over 8,500 screenings.
- *Community Mobile Health Clinic*: Mobile health initiative reaches traditionally underserved communities that face a variety of access and other social barriers to achieving and maintaining good health. People served are typically at higher risk for chronic disease and potentially avoidable hospital utilization. Community-based clinical touches included COVID testing, vaccinations, chronic disease prevention and identification, pediatric wellness visits, and provision of various other community-based health supporting services. In FY23, the Mobile Clinic provided 209 encounters.
- *Cardiovascular Telemonitoring Program*: Remote patient monitoring program to improve the quality of care, patient outcomes, and reduce hospital utilization for patients with chronic diseases by improving patient-provider communication, improving coordination of care, and improving time of follow up with a Primary Care Provider. In FY23, Sinai and Grace enrolled 395 patients in the GetWell Loop Chronic Disease Management program.
- *Community Care Coordination*: Care management services provided to high-risk community members. This program includes collaboration with internal and external mental health practices and referrals to community support resources. The initiative also coordinates transportation to medical appointments and social services. In FY23, this service provided 30,752 encounters.

## **MedStar Health**

MedStar Health operates three hospitals in Baltimore City: MedStar Good Samaritan Hospital, MedStar Harbor Hospital and MedStar Union Memorial Hospital. MedStar's 2021 CHNA process identified three overarching health needs that impact the communities it serves: health and wellness, access to care and services, and SDoH. The health and wellness category was also sub-divided into chronic disease prevention and management; maternal and child health; and behavioral health and SUDs.

The hospitals conduct many community programs related to chronic disease, including diabetes prevention and management classes, blood pressure screenings, tobacco cessation programming, and

stroke support groups. To address behavioral health issues, MedStar Health has expanded the SBIRT strategy in emergency department and primary care settings and embedded Peer Recovery Coaches on hospital care teams. Relative to maternal and child health, the hospital has supported and coordinated an expanded Healthy Babies Collaborative and increased its Birth and Family education scope. To better provide access to care and services, MedStar Health has included mental health services as part of its primary care model and conducted social needs screenings and support linkages as part of care delivery. It has partnered with outside organizations to address SDoH, including the MedStar Health Uber transportation program and workforce development initiatives. MedStar Health assumed the full cost for continuing the Public Health Workforce Support for Disadvantaged Areas post-collaboration grant. To address food access challenges, the Food Rx program is now available through three hospitals with added community partnerships.

### **Mercy Medical Center**

Mercy Medical Center (MMC) is a 183-licensed-bed, general acute care teaching hospital affiliated with the University of Maryland School of Medicine. The MMC campus is located in the heart of Downtown Baltimore, Maryland. MMC is both a prominent community hospital, providing a broad range of primary and secondary acute care services, as well as a preferred tertiary referral center in certain select specialties. MMC gathered both quantitative and qualitative data during its 2021 CHNA process. As part of the quantitative data gathering process for its 2018 and 2021 CHNAs, MMC's Community Benefit Committee worked collaboratively with BCHD and a consortium of Baltimore City Hospitals to obtain uniform quantitative and qualitative data including demographic and health data for Community Statistical Areas (CSAs) and qualitative findings from hundreds of community health surveys and stakeholder interviews.

MMC's Implementation Strategy addresses these priority areas identified in its CHNA: improve healthcare access for people experiencing homelessness; support victims of violence and addiction; enhance birth outcomes and prenatal care; expand access to preventive services; and provide targeted health education and training for future physicians, providers, and nurses. To address these, MMC has implemented evidence-based programs and strong partnerships. For example, MMC's collaboration with Health Care for the Homeless and the Assistance in Community Integration Services Program reduces barriers to care and housing among people experiencing homelessness. Additionally, MMC's Forensic Nurse Examiner program provides timely, trauma-informed care to victims of violence and abuse, including examinations, evidence collection, and support services. MMC screens all patients for substance use through the SBIRT program and offers one of two inpatient detoxification units in Baltimore City. MMC offers various childbirth wrap-around services through its Family Childbirth & Children's Center to improve maternal health outcomes. Further, MMC's Population Health Program develops care plans and provides interventions for high-risk patients to prevent hospitalizations by connecting them to community resources and primary care. MMC also facilitates preventive services and affordable medications for underserved residents through initiatives like the Prescription for Health Program.

### **Mt. Washington Pediatric Hospital**

MWPH, a jointly owned corporate affiliate of the University of Maryland Medical System (UMMS) and Johns Hopkins Medicine, is a specialty rehabilitative and transitional pediatric hospital with 100 years of service in Baltimore. Its 2021 CHNA research was conducted between July 2020 and May 2021 and examined several health indicators, including chronic health conditions, access to healthcare, and SDoH. MWPH collaborated with other local health partners on several key data collection strategies for inclusion

in the CHNA. Nearly 2,500 online and in-person surveys were collected, representing all Baltimore City ZIP codes, and more than 2,700 community members participated in telephonic town halls. Various health experts and community leaders were interviewed and asked to discuss barriers related to accessing healthcare services in Baltimore City. MWPH also analyzed BCHD- and state-provided demographic and statistical information to better understand local health needs and outcomes.

MWPH's implementation strategy addressed the following priority areas, as identified by its CHNA: healthcare access and literacy, food insecurity, mental health and violence prevention. To address these priorities, MWPH implemented a number of programs and activities. MWPH offered immunization clinics in partnership with Baltimore City Public Schools (BCPS), BCHD and Vaccines for Children (State of Maryland) for students missing their childhood immunizations, as well as physicals, hearing, and vision screenings for undocumented, displaced, and guardian-appointed children in Baltimore City. It also revitalized four community gardens in Park Heights. MWPH provided sponsorship to parents and educators at the Maryland Head Start National Conference and worked with various community partners through its Community Health Advisory Board. Other programs included 4-week youth fitness and leadership programs for 75 underserved youth, CPR and First Aid training for 3 Girls Scouts of America troops, and a pilot swim program for underserved local children. MWPH also partnered with MileOne to provide car safety seats for children, and with the Weekend Backpack Program to provide hygiene kits for new moms, families experiencing homelessness, and BCPS.

### **University of Maryland Medical Center**

UMMC, a private, non-profit acute care hospital with two campuses totaling over 800 acute care beds, focused its 2021 CHNA on the seven West Baltimore ZIP codes that represent the majority of its city admissions. UMMC used primary and secondary sources of quantitative and qualitative data, consulting with numerous individuals and organizations, including the general public, community leaders and partners, local health experts, the University of Maryland Rehabilitation and Orthopedic Institute, the University of Maryland Baltimore (UMB) academic community, and BCHD. Using their input and the data collected alongside other Baltimore City CHNA Collaborative members, UMMC collected and analyzed the following data collection components together: public surveys of Baltimore City residents, community member town halls, key stakeholder interviews, key community health focus groups, and key community partner focus groups.

UMMC's FY2021-2024 implementation plan addressed the following priority areas: chronic health conditions (diabetes, hypertension, HIV), maternal and child health, mental health, substance abuse, pediatric asthma, pediatric obesity, pediatric mental health, violence reduction, and career readiness. Although the COVID-19 pandemic created challenges, UMMC formed new partnerships with local schools and community organizations to distribute needed resources including COVID-19 wellness kits, vaccine education and registration support, and flyers for programs and resources.

To address chronic health conditions, UMMC provided community screenings including blood pressure, glucose and A1C, and HIV to raise awareness and provide referrals to manage chronic disease. Maryland Moms program continued to provide virtual learning to educate pregnant women about prenatal care. The workforce development program partnered with many Baltimore city schools, non-profit organizations and local government agencies to support expungement programs and implement career readiness programs for the residents of Baltimore.

## APPENDIX 2 | CITY DEMOGRAPHIC AND SOCIOECONOMIC DETAIL

Detailed information regarding the demographics and socioeconomics of Baltimore City can be found in the tables below.

### City Demographics

#### Age and Total Population

The table below shows the total population in Baltimore City, Baltimore County, Maryland and the United States.

Table A2.1: Total Population, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Population	573,794	859,710	6,259,408	337,470,185

Source: ESRI 2023

The table below shows the percentage of Baltimore City, Baltimore County, Maryland and United States residents by age cohort.

Table A2.2: Age Distribution, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Percentage below 15	16.8%	16.4%	17.6%	18.0%
Percentage between 15 and 44	43.7%	38.9%	39.2%	39.6%
Percentage between 45 and 64	23.0%	24.9%	25.7%	24.6%
Percentage 65 and older	16.5%	19.7%	17.5%	17.8%

Source: ESRI 2023

#### Sex

The table below shows the total population in Baltimore City, Baltimore County, Maryland and the United States by sex.

Table A2.3: Sex Distribution, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Female	52.8%	52.2%	51.3%	50.6%
Male	47.2%	47.8%	48.7%	49.4%

Source: ESRI 2023

The table below shows the percentage and total population of Baltimore City, Baltimore County, Maryland and the United States by sex and age cohort.

A2.4: Sex and Age Distribution, 2023								
	Baltimore City		Baltimore County		Maryland		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
<b>Total</b>	<b>573,794</b>	<b>100.0%</b>	<b>859,710</b>	<b>100.0%</b>	<b>6,259,408</b>	<b>100.0%</b>	<b>337,470,185</b>	<b>100.0%</b>
0-14 years	96,327	16.8%	141,397	16.4%	1,104,084	17.6%	60,750,786	18.0%
15-44 years	250,740	43.7%	334,433	38.9%	2,451,298	39.2%	133,591,630	39.6%
45-65 years	131,800	23.0%	214,154	24.9%	1,606,433	25.7%	83,061,508	24.6%
65+ years	94,927	16.5%	169,726	19.7%	1,097,593	17.5%	60,066,261	17.8%
<b>Males</b>	<b>270,691</b>	<b>47.2%</b>	<b>411,367</b>	<b>47.8%</b>	<b>3,046,001</b>	<b>48.7%</b>	<b>166,821,938</b>	<b>49.4%</b>
0-14 years	48,640	18.0%	71,977	17.5%	563,396	18.5%	31,023,901	51.1%
15-44 years	120,887	44.7%	164,997	40.1%	1,223,965	40.2%	67,793,310	50.7%
45-65 years	62,390	23.0%	101,173	24.6%	773,251	25.4%	40,903,399	49.2%
65+ years	38,774	14.3%	73,220	17.8%	485,389	15.9%	27,101,328	45.1%
<b>Females</b>	<b>303,103</b>	<b>52.8%</b>	<b>448,343</b>	<b>52.2%</b>	<b>3,213,407</b>	<b>51.3%</b>	<b>170,648,247</b>	<b>50.6%</b>
0-14 years	47,687	15.7%	69,420	15.5%	540,688	16.8%	29,726,885	48.9%
15-44 years	129,853	42.8%	169,436	37.8%	1,227,333	38.2%	65,798,320	49.3%
45-65 years	69,410	22.9%	112,981	25.2%	833,182	25.9%	42,158,109	50.8%
65+ years	56,153	18.5%	96,506	21.5%	612,204	19.1%	32,964,933	54.9%

Source: ESRI 2023

### Race

The table below shows the total population in Baltimore City, Baltimore County, Maryland and the United States by race.

Table A2.5: Racial Distribution, 2023								
	Baltimore City		Baltimore County		Maryland		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
White Non-Hispanic	146,924	25.6%	431,552	50.2%	2,867,623	45.8%	191,314,266	56.7%
Black Non-Hispanic	332,377	57.9%	260,766	30.3%	1,834,049	29.3%	40,898,542	12.1%
Asian	21,210	3.7%	57,506	6.7%	439,514	7.0%	20,811,620	6.2%
American Indian & Alaska Native	1,270	0.2%	1,921	0.2%	11,977	0.2%	2,284,715	0.7%
Native Hawaiian/ Other Pacific Islander	152	0.0%	255	0.0%	2,635	0.0%	643,202	0.2%

Source: ESRI 2023

### Ethnicity

The table below shows the total population in Baltimore City, Baltimore County, Maryland and the United States by ethnicity.

Table A2.6: Ethnic Distribution, 2023								
	Baltimore City		Baltimore County		Maryland		United States	
	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total	Count	Pct. of Total
Hispanic	47,869	8.3%	66,577	7.7%	788,675	12.6%	65,536,136	19.4%
Non-Hispanic	525,925	91.7%	793,133	92.3%	5,470,733	87.4%	271,934,049	80.6%

### Language

The table below shows the total population in Baltimore City, Baltimore County, Maryland and the United States by language spoken at home.

Table A2.7: Language Spoken at Home, 2022				
	Baltimore City	Baltimore County	Maryland	United States
English Only	89.0%	85.8%	79.3%	78.0%
Spanish	4.7%	4.0%	8.9%	13.3%
Indo-European Languages	2.5%	4.5%	4.7%	3.8%
Asian and Pacific Islander Languages	1.9%	2.7%	3.9%	3.6%
Other Languages	1.8%	3.0%	3.2%	1.2%

Source: ESRI 2023

### **Socioeconomic Detail**

#### Household Income

The table below shows the median household income of Baltimore City, Baltimore County, Maryland and the United States.

Table A2.8: Median Household Income, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Income	\$55,224	\$82,607	\$93,432	\$72,603

Source: ESRI 2023

#### Poverty

The table below shows the percentage of households living below the federal poverty level in Baltimore City, Baltimore County, Maryland and the United States.

Table A2.9: Percent of Households Below the Federal Poverty Level, 2021				
	Baltimore City	Baltimore County	Maryland	United States
Percent Below FPL	19.7%	9.1%	9.1%	12.4%

Source: ESRI 2023

## Food Stamps/SNAP

The table below shows the percentage of households receiving food stamps or SNAP in Baltimore City, Baltimore County, Maryland and the United States.

Table A2.10: Percent of Households Receiving Food Stamps/SNAP, 2021				
	Baltimore City	Baltimore County	Maryland	United States
Households Receiving Food Stamps/SNAP	56,208	34,031	238,288	14,105,231
Total Households	248,855	333,180	2,363,944	124,010,992
Percentage of Households receiving Food Stamps/SNAP	22.6%	10.2%	10.1%	11.4%

Source: ESRI 2023

## Educational Attainment

The table below shows the percentage of the population in Baltimore City, Baltimore County, Maryland and the United States and the United States broken out by educational attainment.

Table A2.11: Educational Attainment, 2023				
	Baltimore City	Baltimore County	Maryland	United States
Less than 9 <sup>th</sup> Grade	3.5%	2.6%	3.2%	4.1%
Some High School/No Diploma	8.8%	4.8%	4.9%	5.5%
High School Diploma	23.9%	22.1%	21.4%	22.9%
GED/Alternative Credential	5.2%	3.3%	3.2%	4.1%
Some College/No Diploma	16.9%	17.1%	16.4%	17.7%
Associate's Degree	6.5.7%	7.8%	7.5%	9.5%
Bachelor's Degree	18.4%	23.8%	23.3%	22.3%
Graduate/ Professional Degree	17.7%	18.4%	20.2%	13.9%

Source: ESRI 2023

## Unemployment

The table below shows the percentage of the population that is unemployed in Baltimore City, Baltimore County, Maryland and the United States and the United States broken out by age cohort.

**Table A2.12: Unemployment, 2023**

	Baltimore City	Baltimore County	Maryland	United States
Percentage unemployed ages 16 to 24	1.7%	1.3%	1.2%	1.3%
Percentage unemployed ages 25 to 54	2.8%	1.9%	1.9%	2.2%
Percentage unemployed ages 55 to 64	0.7%	0.6%	0.5%	0.6%
Percentage unemployed ages 65 or more	0.5%	0.3%	0.2%	0.2%

Source: ESRI 2023

**Uninsured Population**

The table below shows the percentage of the population that is uninsured in Baltimore City, Baltimore County, Maryland and the United States and the United States broken out by age cohort.

**Table A2.13: Uninsured Population, 2021**

	Baltimore City	Baltimore County	Maryland	United States
Percentage uninsured ages 18 or below	0.8%	0.9%	0.9%	1.3%
Percentage uninsured ages 19 to 34	2.2%	1.9%	2.1%	3.2%
Percentage uninsured ages 35 to 64	2.9%	2.3%	2.8%	4.2%
Percentage uninsured ages 65 or more	0.1%	0.1%	0.1%	0.1%

Source: ACS 2021

## APPENDIX 3 | SECONDARY DATA METHODOLOGY AND SOURCES

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Many individual secondary data measures were analyzed as part of the CHNA process. This data provides detailed insight into the health status and health-related behavior of residents in the city. These secondary data are based on statistics of actual occurrences, such as the incidence of certain diseases, as well as statistics related to SDoH.

### Methodology

All individual secondary data measures were grouped into six categories and 20 corresponding focus areas based on “common themes.” In order to draw conclusions about the secondary data for Baltimore City, its performance on each data measure was compared to targets/benchmarks. If Baltimore City’s performance was more than five percent worse than the comparative benchmark, it was concluded that improvements could likely be needed to better the health of the community. Conversely, if an area performed more than five percent better than the benchmark, it was concluded that while a need is still present, the significance of that need relative to others is likely less acute. The most recently available data were compared to these targets/benchmarks in the following order (as applicable):

- For all available data sources, state and national averages were compared.
- Peer Community for Comparison: For the purposes of this analysis, Baltimore County has been identified as a peer community for comparison, due to the two communities’ relatively similar population density and demographic makeup.

The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than 5 percent worse = High need
- If the data were within or equal to 5 percent (better or worse) = Medium need
- If the data were more than 5 percent better = Low need

These measures are noted with an asterisk.

Additionally, data measures were also viewed with regard to performance over time and whether the measure has improved or worsened compared to the prior CHNA timeframe.

## Data Sources

The following tables are organized by each of the twenty focus areas and contain information related to the secondary data measures analyzed including a description of each measure, the data source, and most recent data time periods.

**Table A3.1: Access to Care**

Measure	Description	Data Source	Most Recent Data Year(s)
Uninsured (percent of population < 65 without health insurance)	Percentage of the population under age 65 without health insurance coverage.	ESRI Business Analyst. Data accessed September 2023.	2021
Primary Care (ratio of population to primary care physicians - population per one provider)	Ratio of the population to primary care physicians. Primary care physicians include practicing non-federal physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The ratio represents the number of individuals served by one physician in a county, if the population was equally distributed across physicians. Prior to the 2013 County Health Rankings, primary care physicians were defined only as M.D.s. In 2013, D.O.s were incorporated into the definition of primary care physicians and obstetrics/gynecology was removed as a primary care physician type.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Dentists (ratio of population to dentists - population per one dentist)	Ratio of the population to dentists. The ratio represents the population served by one dentist if the entire population of a county was distributed equally across all practicing dentists.	ESRI Business Analyst. Data accessed September 2023.	2021
Other primary care providers (ratio of population to other primary care providers - population per one provider)	Ratio of the county population to the number of other primary care providers. Other primary care providers include nurse practitioners (NP), physician assistants (PA), and clinical nurse specialists. Please note that the methods for calculating this measure changed in the 2017 Rankings.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2022
Children receiving dental care (ages 0 to 20)	This indicator reflects the percentage of children (aged 0-20 years) enrolled in Medicaid (320+ days) who received at least one dental visit during the past year.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
ED visit rate due to addiction-related conditions	This indicator shows the rate of emergency department visits related to substance use disorders (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
ED visit rate due to asthma	This indicator shows the rate of emergency department visits due to asthma (per 10,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
ED visit rate due to diabetes	This indicator shows the emergency department visit rate due to diabetes (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
ED visit rate due to hypertension	This indicator shows the rate of emergency department visits due to hypertension (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
ED visit rate due to dental problems	This indicator shows the emergency department visit rate related to dental problems (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
Persons with a usual primary care provider	This indicator shows the percentage of people who reported that they had one person they think of as their personal doctor or healthcare provider.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2021
Uninsured ED visits	This indicator shows the percentage of persons without health (medical) insurance.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
Mental health providers (ratio of population to mental health providers - population per one provider)	Ratio of the population to mental health providers. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and mental health providers that treat alcohol and other drug abuse, as well as advanced practice nurses specializing in mental healthcare. The ratio represents the number of individuals served by one mental health provider in a county, if the population were equally distributed	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	across providers. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.		

**Table A3.2: Built Environment**

Measure	Description	Data Source	Most Recent Data Year(s)
Food environment index (index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best))	<p>The Food Environment Index measures the quality of the food environment in a county on a scale from 0 to 10. The Food Environment Index is comprised of two variables: Limited access to healthy foods from the USDA’s Food Environment Atlas estimates the percentage of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas: in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.</p> <p>Food insecurity from Feeding America estimates the percentage of the population who did not have access to a reliable source of food during the past year. The two variables are scaled from 0 to 10 (zero being the worst value in the nation, and 10 being the best) and averaged to produce the Food Environment Index. In 2016, the average value for counties was 7.0 and most counties fell between about 5.4 and 8.3.</p>	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2019 & 2020
Access to exercise opportunities (percent of the population with adequate access to locations for physical activity)	Percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Individuals are considered to have access to exercise	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2022 & 2020

Measure	Description	Data Source	Most Recent Data Year(s)
	<p>opportunities if they: reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally reliable and updated data source.</p>		
% Broadband Access	Percentage of households with broadband internet connection.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021

**Table A3.3: Diet and Exercise**

Measure	Description	Data Source	Most Recent Data Year(s)
Physical inactivity (percent of adults that report no leisure time physical activity)	Percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month. Examples of physical activities include running, calisthenics, golf, gardening, or walking for exercise. The method for calculating Physical Inactivity changed. Data for Physical Inactivity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Physical Inactivity is created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Physical Activity (percentage)	This indicator shows the percentage of persons who reported at least 150 minutes of moderate physical activity or at least 75 minutes of vigorous physical activity per week.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2019

**Table A3.4: Education**

Measure	Description	Data Source	Most Recent Data Year(s)
Students entering kindergarten ready to learn	This indicator shows the percentage of students who enter Kindergarten ready to learn.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
School Segregation	The extent to which students within different race and ethnicity groups are unevenly distributed across schools when compared with the racial and ethnic composition of the local population. The index ranges from 0 to 1 with lower values representing a school composition that approximates race and ethnicity distributions in the student populations within the county, and higher values representing more segregation.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2021-2022
School Funding Adequacy	The average gap in dollars between actual and required spending per pupil among public school districts. Required spending is an estimate of	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County	2020

Measure	Description	Data Source	Most Recent Data Year(s)
	dollars needed to achieve U.S. average test scores in each district.	Health Rankings. Data accessed September 2023.	
% Less than 9 <sup>th</sup> Grade	Percentage of adults over age 25 who have less than a 9 <sup>th</sup> grade education.	ESRI Business Analyst. Data accessed September 2023.	2023
% Some High School	Percentage of adults over age 25 who attended some high school but did not earn their diploma or alternative credential.	ESRI Business Analyst. Data accessed September 2023.	2023
% High School Diploma	Percentage of adults over age 25 who earned a high school diploma.	ESRI Business Analyst. Data accessed September 2023.	2023
% GED/Alternative Credential	Percentage of adults over age 25 who earned a GED or an alternative credential.	ESRI Business Analyst. Data accessed September 2023.	2023
% Some College	Percentage of adults over age 25 who attended some college but did not earn their diploma.	ESRI Business Analyst. Data accessed September 2023.	2023
% Associate's Degree	Percentage of adults over age 25 who earned an Associate's degree.	ESRI Business Analyst. Data accessed September 2023.	2023
% Bachelor's Degree	Percentage of adults over age 25 who earned a four-year college Bachelor's degree.	ESRI Business Analyst. Data accessed September 2023.	2023
% Graduate/ Professional Degree	Percentage of adults over age 25 who earned a graduate or professional degree.	ESRI Business Analyst. Data accessed September 2023.	2023

**Table A3.5: Employment**

Measure	Description	Data Source	Most Recent Data Year(s)
Unemployment rate (percent of population age 16+ unemployed)	Percentage of a county's workforce that is not employed. The numerator is the number of individuals over age 16 in a county who are seeking work but do not have a job. The denominator is the total labor force, which includes all individuals over age 16 who are actively searching for work and unemployed plus those who are employed. Unemployment estimates are modeled.	ESRI Business Analyst. Data accessed September 2023.	2023

**Table A3.6: Environmental Quality**

Measure	Description	Data Source	Most Recent Data Year(s)
Air pollution (avg daily measure of fine particulate matter in micrograms per cubic meter)	<p>Average daily density of fine particulate matter in micrograms per cubic meter. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers (PM2.5).</p> <p>Air Pollution is modeled. For 2017, County Health Rankings is using data provided by the EPHT Network. From 2013-2016 the County Health Rankings used data provided by the NASA Applied Sciences Program, which used a similar methodology but also incorporates satellite data. For 2012 and prior years of the County Health Rankings, data were obtained from the EPHT Network, but the measures of air quality differed from the current measure: County Health Rankings reported the average number of days annually that both PM2.5 and ozone pollution were reported to be over the accepted limit.</p>	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2019
Presence of Water Violation	Indicator of the presence of health-related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2021
Days with Unhealthy Air Quality	Number of days where the daily 8-hour maximum concentration of ozone exceeded 71 parts per billion, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.	American Lung Association. Data accessed September 2023.	2019-2021
Days with Unhealthy Particle Pollution	Number of days where the daily 24-hour maximum concentration for particles with diameter less than 2.5 micrometers exceeded 33.5 micrograms per cubic meter, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.	American Lung Association. Data accessed September 2023.	2019-2021

**Table A3.7: Family, Community, and Social Support**

Measure	Description	Data Source	Most Recent Data Year(s)
Percentage of children that live in single-parent household	Percentage of children (less than 18 years of age) in family households that live in a household headed by a single parent. The single parent could be a male or female and is without the presence of a spouse. Foster children and children living in non-family households or group quarters are not included in either the numerator or denominator.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Social associations (number of membership associations per 10,000 population)	Number of organizations per 10,000 population in a county. The numerator is the number of organizations or associations in a county. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, political organizations, labor organizations, business organizations, and professional organizations. The denominator is the population of a county. Social Associations does not measure all of the social support available within a county. Data and business codes are self-reported by businesses in a county. We use the primary business code of organizations, which in some cases may not match up with our notion of what should be labeled as a civic organization. This measure does not take into account other important social connections offered via family support structures, informal networks, or community service organizations, all of which are important to consider when understanding the amount of social support available within a county.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Disconnected youth	Percentage of teens and young adults ages 16-24 who are neither working nor in school.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Residential segregation - black/white	Degree to which two or more groups live separately from one another in a geographic area. The index of	Robert Wood Johnson Foundation & University of Wisconsin Population	2017-2021

Measure	Description	Data Source	Most Recent Data Year(s)
	dissimilarity is a demographic measure of the evenness with which two groups (black and white residents, in this case) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case). The index score can be interpreted as the percentage of either black or white residents that would have to move to different geographic areas in order to produce a distribution that matches that of the larger area.	Health Institute, County Health Rankings. Data accessed September 2023.	
Percentage not proficient in English	Percentage of population that is not proficient in English.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Childcare Cost Burden	Childcare costs for a household with two children as a percent of median household income.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2022 & 2021
Childcare Centers	Number of childcare centers per 1,000 population under 5 years old.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2010-2022
Diversity Index	Likelihood of two people chosen at random being from a different race/ethnicity.	ESRI Business Analyst. Data accessed September 2023.	2023

**Table A3.8: Food Security**

Measure	Description	Data Source	Most Recent Data Year(s)
Percentage of households experiencing food insecurity	Percentage of the population who did not have access to a reliable source of food during the past year. This measure was modeled using information from the Community Population Survey, Bureau of Labor Statistics, and American Community	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020

Measure	Description	Data Source	Most Recent Data Year(s)
	Survey. More detailed information can be found here. This is one of two measures that are used to construct the Food Environment Index.		
Limited access to healthy foods	Percentage of population who are low-income and do not live close to a grocery store.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2019
Children eligible for free or reduced-price lunch	Percentage of children enrolled in public schools, grades PK - 12, eligible for free (family income less than 130 percent of federal poverty level) or reduced price (family income less than 185 percent of federal poverty level) lunch.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020-2021
Food Insecurity Among Middle School Students: All races/ethnicities	Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.	The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.	2021-2022
Food Insecurity Among High School Students: All races/ethnicities	Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.	The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.	2021-2022

**Table A3.9: Housing and Homelessness**

Measure	Description	Data Source	Most Recent Data Year(s)
Severe housing problems (percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities)	Percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Household is severely overcrowded; or Household is severely cost burdened. Incomplete kitchen facilities is defined as a unit which lacks a sink with running water, a range or a refrigerator. Incomplete plumbing facilities is defined as lacking hot and	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2015-2019

Measure	Description	Data Source	Most Recent Data Year(s)
	cold piped water, a flush toilet, or a bathtub/shower. Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50 percent of monthly income. The numerator is the number of households in a county with at least one of the above housing problems and the denominator is the number of total households in a county.		
Percentage of owner-occupied housing	Percentage of occupied housing units that are owned.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Percentage of people spending more than 50 percent of their income on rental housing	Number of renter-occupied housing units spending 50 or more percent of household income on rent as a percentage of total renter-occupied housing units.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Affordable Housing (percentage)	This indicator shows the percentage of housing units sold that are affordable on the median teacher's salary.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2016

**Table A3.9: Income**

Measure	Description	Data Source	Most Recent Data Year(s)
Children in poverty (percent of children under age 18 in poverty)	Percentage of children under age 18 living in poverty. Poverty status is defined by family size and income and is measured at the household level. If a household's income is lower than the poverty threshold for a household of their size, they are considered to be in poverty. Poverty thresholds differ by household size and geography. For more information on how poverty thresholds are calculated please see	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2021

Measure	Description	Data Source	Most Recent Data Year(s)
	the Census poverty page. Children in Poverty estimates are modeled.		
Median household income	<p>Income where half of households in a county earn more and half of households earn less. Income, defined as “Total income”, is the sum of the amounts reported separately for: wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. Receipts from the following sources are not included as income: capital gains; money received from the sale of property (unless the recipient was engaged in the business of selling such property); the value of income “in kind” from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts.</p>	ESRI Business Analyst. Data accessed September 2023.	2023
Income inequality (ratio of household income at the 80th percentile to income at the 20th percentile)	<p>Ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20 percent of households have higher incomes, and the 20th percentile is the level of income at which only 20 percent of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum.</p>	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021

Measure	Description	Data Source	Most Recent Data Year(s)
Percentage of individuals living in poverty	Number of people living below poverty level as percent of total population.	MedStar Franklin Square, FY21 Community Health Needs Assessment Advisory Taskforce Kickoff Meeting. Data accessed September 2023.	2017-2021
Household Income (\$, 000s) - All	Average annual household income in 2014-2015 for children (now in their mid-30s) who grew up in this area.	The Opportunity Atlas, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University. Data accessed September 2023.	2014-2015
% Asset Limited, Income Constrained, Employed Households	Percentage of households who are earning more than the Federal Poverty Level, but not enough to afford the basics where they live.	United for ALICE. Data accessed September 2023.	2021
Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers, presented as "cents on the dollar."	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021

**Table A3.10: Length of Life**

Measure	Description	Data Source	Most Recent Data Year(s)
Premature Death (years of potential life lost before age 75 per 100,000 population age-adjusted)	Number of events (i.e., deaths, births, etc.) in a given time period (three-year period) divided by the average number of people at risk during that period. Years of potential life lost measures mortality by giving more weight to deaths at earlier ages than deaths at later ages. Premature deaths are deaths before age 75. All of the years of potential life lost in a county during a three-year period are summed and divided by the total population of the county during that same time period-this value is then multiplied by 100,000 to calculate the years of potential life lost under age 75 per 100,000 people. These are age-adjusted.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2018-2020

Measure	Description	Data Source	Most Recent Data Year(s)
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted).	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2018-2020
Life expectancy	Average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime. Based on life expectancy at birth. State data are a single year while county data are a three-year aggregate. Data were not reported in the County Health Book prior to 2013.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2018-2020
Child mortality	Number of deaths among children under age 18 per 100,000 population	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2020

**Table A3.11: Maternal and Infant Health**

Measure	Description	Data Source	Most Recent Data Year(s)
Low birthweight (percent of live births with birthweight < 2500 grams)	Percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.). The numerator is the number of low birthweight infants born over a 7-year time span, while the denominator is the total number of births in a county during the same time.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2014-2020
Infant mortality	Number of all infant deaths (within 1 year), per 1,000 live births.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2014-2020

**Table A3.12: Mental Health**

Measure	Description	Data Source	Most Recent Data Year(s)
<p>Poor mental health days (avg number in past 30 days age-adjusted)</p>	<p>Average number of mentally unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. Poor Mental Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC's BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Mental Health Days estimates are created using statistical modeling.</p>	<p>Robert Wood Johnson Foundation &amp; University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.</p>	<p>2020</p>
<p>Frequent mental distress</p>	<p>Percentage of adults who reported ≥14 days in response to the question, "Now, thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"</p>	<p>Robert Wood Johnson Foundation &amp; University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.</p>	<p>2020</p>
<p>ED visit rate due to mental health conditions</p>	<p>This indicator shows the rate of emergency department visits related</p>	<p>Maryland Department of Health, State Health Improvement Process</p>	<p>2017</p>

Measure	Description	Data Source	Most Recent Data Year(s)
	to mental health disorders (per 100,000 population).	(SHIP). Data accessed September 2023.	
Suicide Rate	This indicator shows the suicide rate per 100,000 population.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2016-2020
Hospitalization rate due to Alzheimer’s or other dementias	This indicator shows the rate of hospitalizations related to Alzheimer’s or other dementias (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
% Visited Mental Health Provider	Percent of adults who saw a psychologist or psychiatrist in the past 12 months.	ESRI Business Analyst. Data accessed September 2023.	2023
% Used Prescription Antidepressant Medications	Percent of adults who were prescribed and used antidepressant medications in the last 12 months.	ESRI Business Analyst. Data accessed September 2023.	2023
% Used Prescription Antianxiety Medications	Percent of adults who were prescribed and used antianxiety medications in the last 12 months.	ESRI Business Analyst. Data accessed September 2023.	2023
% Depressive Disorder Diagnosis	Percent of adults reporting that a health professional has told them that they have a depressive disorder.	American Health Rankings. Data accessed September 2023.	2022

**Table A3.13: Physical Health**

Measure	Description	Data Source	Most Recent Data Year(s)
Poor or fair health (percent of adults reporting fair or poor health age-adjusted)	Percentage of adults in a county who consider themselves to be in poor or fair health. This measure is based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) question: “In general, would you say that your health is excellent, very good, good, fair, or poor?” The value reported in the County Health Rankings is the percentage of respondents who rated their health “fair” or “poor.” Poor or Fair Health is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020

Measure	Description	Data Source	Most Recent Data Year(s)
	<p>However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor or Fair Health estimates are created using statistical modeling.</p>		
<p>Poor physical health days (avg number of unhealthy days in past 30 days, age-adjusted)</p>	<p>Average number of physically unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” The value reported in the County Health Rankings is the average number of days a county’s adult respondents report that their physical health was not good. Poor Physical Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age,</p>	<p>Robert Wood Johnson Foundation &amp; University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.</p>	<p>2020</p>

Measure	Description	Data Source	Most Recent Data Year(s)
	sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Physical Health Days estimates are created using statistical modeling.		
Adult obesity (percent of adults that report a BMI $\geq 30$ )	Based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) and is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m <sup>2</sup> . Participants are asked to self-report their height and weight. From these reported values, BMIs for the participants are calculated. The method for calculating Adult Obesity changed. Data for Adult Obesity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Adult Obesity is created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Frequent physical distress	Percentage of adults who reported $\geq 14$ days in response to the question, "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Diabetes prevalence	Prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Insufficient Sleep	Percentage of adults who report fewer than 7 hours of sleep on average.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020

Measure	Description	Data Source	Most Recent Data Year(s)
Adolescents who are obese	This indicator shows the percentage of adolescent public high school students who are obese.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2016
Sudden unexpected infant death rate	This indicator shows the rate of sudden unexpected infant deaths (SUIDs) per 1,000 live births. Sudden unexpected infant deaths (SUIDs) include deaths from Sudden Infant Death Syndrome (SIDS), unknown cause, accidental suffocation and strangulation in bed.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2016-2020
Adults who are not overweight or obese (percentage)	This indicator shows the percentage of adults who are not overweight or obese.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2021
Cancer mortality rate	This indicator shows the age-adjusted mortality rate from cancer (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2018-2020
Age-Adjusted Mortality Rate from Heart Disease	This indicator shows the age-adjusted mortality rate from heart disease (per 100,000 population).	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2018-2020
Age-adjusted Death Rate due to Diabetes (per 100,000 population)	Age-adjusted Death Rate due to Diabetes (per 100,000 population).	MD Vital Statistics Report. Data accessed September 2023.	2020
Age-adjusted Death Rate due to Stroke (per 100,000 population)	Age-adjusted Death Rate due to Stroke (per 100,000 population).	MD Vital Statistics Report. Data accessed September 2023.	2020

**Table A3.14: Quality of Care**

Measure	Description	Data Source	Most Recent Data Year(s)
Preventable hospital stays (rate for ambulatory sensitive conditions per 1,000 Medicare enrollees)	Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. That means it looks at people who were discharged from the hospital for conditions that, with appropriate care, can normally be treated without the need for a hospital stay. Examples of these conditions include convulsions, chronic obstructive pulmonary	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020

Measure	Description	Data Source	Most Recent Data Year(s)
	disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. Preventable hospital stays are measured among fee-for-service Medicare enrollees and is age-adjusted.		
Mammography screening (percent of female Medicare enrollees)	Percentage of female Medicare enrollees ages 67-69 that received at least one mammogram during the last two years. The numerator is women ages 67-69 on Medicare who have received at least one mammogram during the past year. The denominator is all women ages 67-69 on Medicare in a specific geography.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Children and adults who are vaccinated annually against seasonal influenza	Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Children receiving blood lead screening	This indicator reflects the percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) screened for lead in their blood.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2021
Children with elevated blood lead levels	Number of children (0-72 months old) with blood lead levels > 10 µg/dL divided by the Total Number of Children (0-72 months old) tested.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2020
Early prenatal care	This indicator shows the percentage of pregnant women who receive prenatal care beginning in the first trimester.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2020

**Table A3.15: Safety**

Measure	Description	Data Source	Most Recent Data Year(s)
Injury mortality per 100,000 population	Number of deaths from planned (e.g., homicide or suicide) and unplanned (e.g., motor vehicle deaths) injuries per 100,000	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County	2016-2020

Measure	Description	Data Source	Most Recent Data Year(s)
	population. This measure includes injuries from all causes and intents over a 5-year period. Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred.	Health Rankings. Data accessed September 2023.	
Motor vehicle crash deaths	Number of deaths due to traffic accidents involving a motor vehicle per 100,000 population. Motor vehicle crash deaths include traffic accidents involving motorcycles; 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bicyclists or pedestrians when colliding with any of the previously listed motor vehicles. Deaths due to boating accidents and airline crashes are not included in this measure. In prior years, non-traffic motor vehicle accidents were included in this definition. ICD10 codes included are V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19 (.4-.6), V20-V28 (.3-.9), V29-V79 (.4-.9), V80 (.3-.5), V81.1, V82.1, V83-V86 (.0-.3), V87 (.0-.8), and V89.2.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2014-2020
Homicides	Number of deaths from assaults, defined as ICD-10 codes X85-Y09, per 100,000 population	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2016-2020
Firearm fatalities	Number of deaths due to firearms, defined as ICD-10 codes W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0, per 100,000 population.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2019
Juvenile arrests	Rate of delinquency cases per 1,000 juveniles.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
Child maltreatment rate	This indicator shows the rate of children who are maltreated per 1,000 population under the age of 18.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2018-2020
Fall-related death rate	This indicator shows the rate of fall-related deaths per 100,000 population.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2017
Pedestrian injury rate on public roads	This indicator shows the rate of pedestrian injuries on public roads per 100,000 population.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2020
Domestic Violence	Number of domestic violence crimes divided by total population.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2020

**Table A3.16: Sexual Health**

Measure	Description	Data Source	Most Recent Data Year(s)
Sexually transmitted infections (chlamydia rate per 100,000)	Number of newly diagnosed chlamydia cases per 100,000 population	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Teen birth rate (per 1,000 females ages 15-19)	Number of births to females ages 15-19 per 1,000 females	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2014-2020
HIV prevalence	Number of diagnosed cases of HIV for persons aged 13 years and older in a county per 100,000 population.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
HIV incidence rate	This indicator shows the rate of adult/adolescent cases (age 13+) diagnosed with HIV (per 100,000 population).	Maryland Department of Health, State Health Improvement Process	2021

Measure	Description	Data Source	Most Recent Data Year(s)
		(SHIP). Data accessed September 2023.	

**Table A3.17: Substance Use Disorders**

Measure	Description	Data Source	Most Recent Data Year(s)
Excessive drinking	Percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings. Excessive Drinking estimates are created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Alcohol-impaired driving deaths	Percentage of motor vehicle crash deaths which had alcohol involvement. The National Highway Traffic Safety Administration defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a non-motorist (usually a pedestrian or bicyclist) had a measurable or estimated blood alcohol concentration of 0.01 grams per deciliter or above. Alcohol-Impaired Driving Deaths are measured in the county of occurrence.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2016-2020
Drug overdose deaths	Number of deaths due to drug poisoning per 100,000 population. ICD-10 codes used include X40-X44, X60-X64, X85, and Y10-Y14. These codes cover accidental, intentional, and undetermined poisoning by and exposure to: 1) nonopioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs,	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2018-2020

Measure	Description	Data Source	Most Recent Data Year(s)
	medicaments and biological substances.		
Opioid prescriptions dispensed (per 100 persons)	Opioid prescriptions dispensed (per 100 persons).	Center for Disease Control and Prevention. Data accessed September 2023.	2020

**Table A3.18: Tobacco Use**

Measure	Description	Data Source	Most Recent Data Year(s)
Adult smoking	Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings. Adult Smoking estimates are created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2020
Adolescents who use tobacco products	This indicator shows the percentage of adolescents (public high school students) who used any tobacco product in the last 30 days.	Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.	2016

**Table A3.19: Transportation Options and Transit**

Measure	Description	Data Source	Most Recent Data Year(s)
Driving alone to work (percent of the workforce that drives alone to work)	Percentage of the workforce that usually drives alone to work. The numerator is the number of workers who commute alone to work via a car, truck, or van. The denominator is the total workforce.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Long commute/driving alone (among workers who commute in their car alone, the percentage that commute more than 30 minutes)	Percentage of workers who drive alone (via car, truck, or van) with a commute longer than 30 minutes. The numerator is the number of workers who drive alone for more than 30 minutes during their commute. The denominator is the number of workers who drive alone during their commute.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.	2017-2021
Traffic volume	Average traffic volume per meter of major roadways in the county.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data	2019

Measure	Description	Data Source	Most Recent Data Year(s)
		accessed September 2023.	
% Car Ownership	Percent of households that own at least one insured car.	ESRI Business Analyst. Data accessed September 2023.	2023
Household Intracity Mass Transit Spending	Average household spending on fares for mass transit trips within the city.	ESRI Business Analyst. Data accessed September 2023.	2023



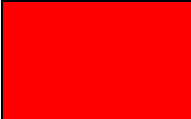
## APPENDIX 4 | SECONDARY DATA COMPARISONS

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### Description of Focus Area Comparisons

When viewing the secondary data summary tables, please note that the following color shadings have been included to identify how Baltimore City compares to Maryland and the national benchmark. If both statewide Maryland and national data was available, Maryland data was preferentially used as the target/benchmark value.

**Secondary Data Summary Table Color Comparisons**

Color Shading	Priority Level	Baltimore City Description
	Low	Represents measures in which Baltimore City scores are <b>more than five percent better</b> than the most applicable target/benchmark and for which a low priority level was assigned.
	Medium	Represents measures in which Baltimore City scores are comparable to the most applicable target/benchmark scoring <b>within or equal to five percent</b> , and for which a medium priority level was assigned.
	High	Represents measures in which Baltimore City scores are <b>more than five percent worse</b> than the most applicable target/benchmark and for which a high priority level was assigned.

Note: Please see the methodology section of this report for more information on assigning need levels to the secondary data.

Please note that to categorize each metric in this manner and identify the priority level, the Baltimore City value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

$$(Baltimore\ Value - Benchmark\ Value) / (Benchmark) \times 100 = \% \text{ Difference Used to Identify Priority Level}$$

For example, for the % Children Receiving Dental Care metric, the following calculation was completed:

$$(50.8 - 56.3) / (56.3) \times 100\% = -9.77\% = \text{Displayed as High Priority Level, Shaded in Red}$$

This metric indicates that the percentage of children with access to dental care in Baltimore City is 9.8 percent worse than the percentage of children with access to dental care in the state of Maryland.

## Detailed Focus Area Benchmarks

**Table A4.1: Access to Care**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Uninsured	10.0%	6.7%	5.9%	2021	Medium
Primary Care Physicians Ratio	1,310:1	1,133:1	804:1	2020	Low
Dentist Ratio	1,380:1	1,258:1	1,206:1	2021	Medium
Other Primary Care Provider Ratio	810:1	775:1	316:1	2022	Low
Children receiving dental care	N/A	56.3%	50.8%	2021	High
ED visits due to addiction-related conditions	N/A	2,017	1,689	2017	Low
ED visits due to asthma	N/A	68.4	68.0	2017	Medium
ED visits due to diabetes	N/A	243.7	224.6	2017	Low
ED visits due to hypertension	N/A	351.2	340.7	2017	Medium
ED visits due to dental care	N/A	362.7	281.1	2017	Low
Persons with usual primary care provider	N/A	87.3%	85.3%	2021	Medium
Uninsured ED visits	N/A	8.6	7.9	2017	Low

**Table A4.2: Built Environment**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Food Environment Index	7.0	8.7	7.5	2019/2020	High
% with Access to Exercise Opportunities	84.0%	92.0%	98.8%	2020/2022	Low
Broadband Access	87.0%	90.0%	80.0%	2017-2021	High

**Table A4.3: Diet and Exercise**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Physically Inactive	22.0%	20.6%	25.3%	2020	High

**Table A4.4: Education**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Students entering kindergarten ready to learn	N/A	45.0%	47.0%	2017	Medium
School segregation	0.25	0.26	0.29	2021-2022	High
School funding adequacy	1,062	724	-7,285	2020	High

**Table A4.5: Employment**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Unemployed	5.4%	3.8%	5.7%	2023	High

**Table A4.6: Environmental Quality**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Average Daily PM2.5	7.4	7.4	8.6	2019	High

**Table A4.7: Family, Community and Social Support**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Children in Single-Parent Households	25.0%	26.2%	49.2%	2017-2021	High
Social Association Rate	9.1	8.9	10.0	2020	Low
% Disconnected Youth	7.0%	6.0%	10.1%	2017-2021	High
Segregation Index – Black/White	63.0	63.5	67.6	2017-2021	High
% Not Proficient in English	14.0%	3.0%	1.6%	2017-2021	Low
Childcare Cost Burden	27.0%	22.0%	39.0%	2021/2022	High

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Childcare Centers	7.0	6.0	6.0	2010-2022	Medium

**Table A4.8: Food Security**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Food Insecure	12.0%	9.0%	15.5%	2020	High
% Limited Access to Health Foods	6.0%	3.6%	1.8%	2019	Low
% Eligible for Free or Reduced Lunch	53.0%	45.0%	66.1%	2020-2021	High
% Households with Children Receiving Public Assistance	24.4%	21.2%	47.7%	2020	High
Food Insecurity: Middle Schoolers	N/A	27.5%	41.8%	2021-2022	High
Food Insecurity: Middle Schoolers	N/A	27.5%	43.9%	2021-2022	High

**Table A4.9: Housing and Homelessness**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Severe Housing Problems	17.0%	15.7%	21.4%	2015-2019	High
% Homeowners	65.0%	67.3%	47.9%	2017-2021	High
% Severe Housing Cost Burden	14.0%	14.0%	20.0%	2017-2021	High
% Affordable Housing	N/A	48.1%	91.9%	2016	Low

**Table A4.10: Income**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Children in Poverty	17.0%	14.0%	33.8%	2021	High
Median Household Income	\$69,700	\$93,432	\$55,224	2023	High

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Income Inequality	4.9	4.5	6.2	2017-2021	High
% Living in Poverty	12.8%	10.3%	23.0%	2017-2021	High
ALICE Households	28%	29%	53%	2021	High
Gender Pay Gap	0.81	0.87	0.93	2017-2021	Low

**Table A4.11: Length of Life**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Years of Potential Life Lost Rate	7,300	7,547	14,844.8	2018-2020	High
Premature Age-Adjusted Mortality	360	360	683.6	2018-2020	High
Life Expectancy	78.5	78.6	71.8	2018-2020	High
Child Mortality Rate	50.0	48.5	90.0	2017-2020	High

**Table A4.12: Maternal and Infant Health**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Low Birthweight	8.0%	8.7%	11.9%	2014-2020	High
Infant Mortality Rate	6.0	6.3	9.1	2014-2020	High

**Table A4.13: Mental Health**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Mental Health Provider Ratio	340:1	315:1	170:1	2022	Low
Average No. of Mentally Unhealthy Days	4.4	4.1	5.4	2020	High
% Frequent Mental Distress	14.0%	12.7%	16.2%	2020	High
ED visits due to mental health conditions	N/A	4,291.5	4,210.1	2017	Medium
Hospitalization rate due to Alzheimer's or other dementias	N/A	515.5	559.0	2017	High

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Visited Mental Health Provider	N/A	4.7%	5.2%	2023	High
% Used Prescription Antidepressant Medications	N/A	6.7%	7.0%	2023	High
% Used Prescription Antianxiety Medications	N/A	7.6%	7.8%	2023	Medium
Depression rate	20.5%	16.6%	20.7%	2022	High
Suicide death rate	14.0	10.0	8.8	2016-2020	Low

**Table A4.14: Physical Health**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Adults with Obesity	32.0%	30.9%	37.4%	2020	High
% Adults with Diabetes	9.0%	9.1%	13.4%	2020	High
% Frequent Physical Distress	9.0%	6.8%	10.1%	2020	High
% Insufficient Sleep	33.0%	34.1%	39.8%	2020	High
% Fair or Poor Health	12.0%	10.6%	39.8%	2020	High
Avg. No. of Physically Unhealthy Days	3.0	2.5	3.3	2020	High
Adolescents who are obese	N/A	15.9%	23.2%	2016	High
Adults who are not overweight or obese (%)	N/A	33.4%	33.9%	2021	Low
Age-Adjusted Death Rate from Heart Disease	N/A	163.3	226.7	2018-2020	High
Cancer Mortality Rate	N/A	145.5	187.9	2018-2020	High
Sudden unexpected infant death rate	N/A	0.8	2.0	2016-2020	High

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Age-adjusted Death Rate due to Stroke	38.8	42.5	55.9	2020	High

**Table A4.15: Quality of Care**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Children/adults vaccinated annually against seasonal influenza	51.0%	55.0%	51.0%	2020	High
Mammography screening	37.0%	37.0%	36.0%	2020	Medium
Preventable hospital stays	28.1	26.5	40.9	2020	High
Children receiving blood lead screening	N/A	67.1	65.9%	2021	Medium
Children with elevated blood lead levels	N/A	0.2	0.2%	2020	Medium
Early prenatal care	N/A	70.2%	67.1%	2020	Medium

**Table A4.16: Safety**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Firearm fatalities	12.0	12.3	43.7	2019	High
Homicides	6.0	9.1	43.2	2016-2020	High
Injury mortality	76.0	88.3	200.2	2016-2020	High
Juvenile arrests	24.0	27.1	25.3	2022	Low
Motor vehicle crash deaths	12.0	8.9	9.5	2014-2020	High
Child maltreatment rate	N/A	4.6	10.3	2018-2020	High
Domestic Violence	N/A	568.6	1,112.9	2020	High
Fall-related death rate	N/A	10.6	13.0	2017	High
Pedestrian injury rate on public roads	N/A	53.5	54.4	2020	Medium

**Table A4.17: Sexual Health**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Teen Birth Rate	19.0	15.2	32.2	2014-2020	High
HIV Prevalence Rate	380.0	655.4	1,984.7	2020	High
HIV Incidence Rate	N/A	15.0	32.8	2021	High
Chlamydia Rate	481.3	535.9	1,181.8	2020	High

**Table A4.18: Substance Use Disorders**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Drug Overdose Mortality Rate	23.0	41.1	123.7	2018-2020	High
% Excessive Drinking	19.0%	14.6%	17.9%	2020	High
% Driving Deaths with Alcohol	27.0%	28.3%	20.3%	2016-2020	Low
Opioid prescriptions dispensed	43.3	39.5	68.6	2020	High

**Table A4.19: Tobacco Use**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
% Smokers	16.0%	11.1%	19.2%	2020	High
Adolescents who use tobacco products	N/A	14.4%	16.5%	2016	High

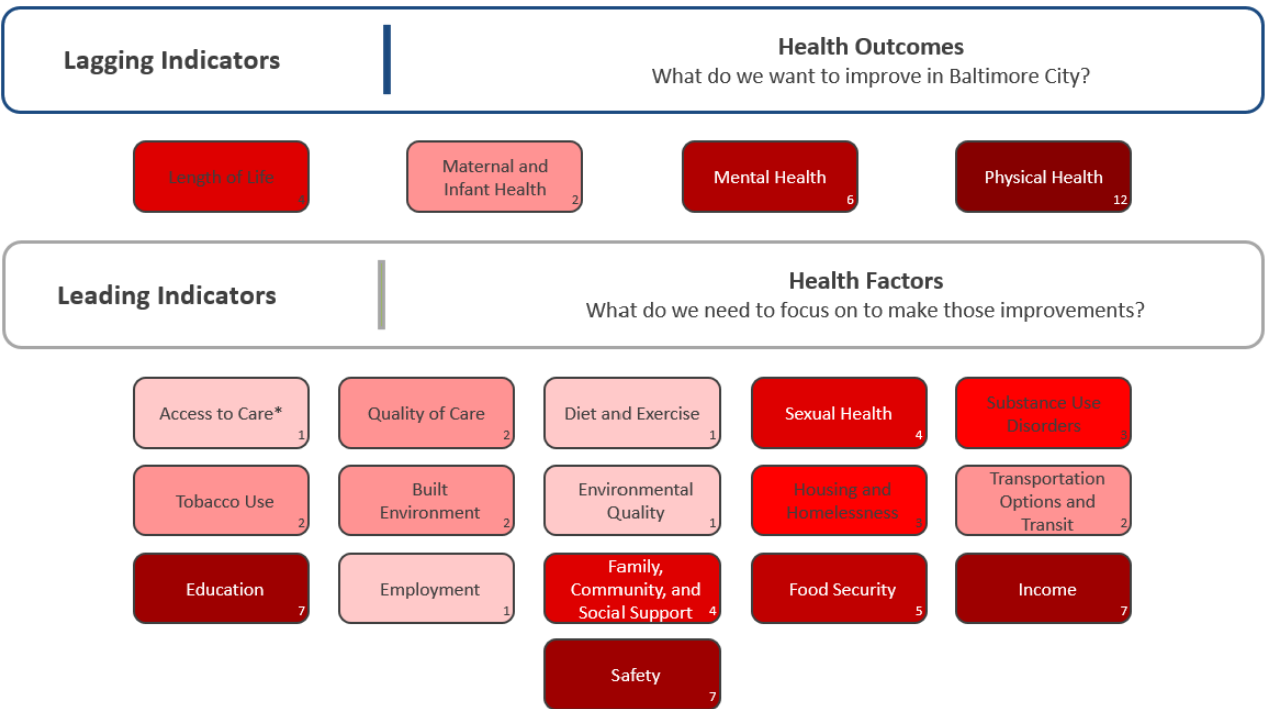
**Table A4.20: Transportation Options and Transit**

Measure	National Benchmark	Maryland Benchmark	Baltimore City Data	Most Recent Data Year	Baltimore City Need
Traffic Volume	505.0	695.2	1,443.3	2019	High
% Drive Alone to Work	73.0%	69.8%	42.9%	2017-2021	Low
% Long Commute – Drives Alone	37.0%	49.6%	58.2%	2017-2021	Low
% Car Ownership	N/A	89.8%	81.9%	2023	High
Mass Transit Spending	N/A	102.6	99.7	2023	Medium

## APPENDIX 5 | SECONDARY DATA SUMMARY

The table and graphic below include summaries of potential priority need areas, as identified by the secondary data analysis process, as well as priority areas of need identified by other state, local, and national sources.

Priority Area	Secondary Data Findings	Mercy Medical 2021	MedStar Health 2021	Kennedy Krieger 2022	Sheppard Pratt 2022	Alivet Maryland 2022	Baltimore Medical 2020	Healthy People 2030
Social Determinants of Health	✓	✓	✓	✓	✓	✓	✓	✓
Access to Health Care	✓	✓	✓	✓	✓	✓	✓	✓
Mental Health and Behavioral Health/ Wellness	✓	✓	✓	✓	✓	✓	✓	
Health Equity		✓	✓	✓		✓	✓	✓
Substance Use	✓	✓	✓		✓		✓	
Health Literacy and Communication		✓	✓	✓	✓	✓	✓	✓
Specialty Care		✓	✓	✓		✓		
Childhood Support	✓	✓		✓			✓	
Chronic Disease	✓	✓	✓				✓	
Sexual Health	✓	✓				✓	✓	
Primary Care		✓	✓			✓	✓	
Obesity/Diabetes/Fitness/Nutrition	✓		✓				✓	
Staffing Support				✓	✓	✓		
Infant and Maternal Health	✓	✓					✓	



Values in bottom right represent number of measures with high need.

\*Access to care metrics are based on the ratio of city population to providers, which does not account for the significant in-migration that occurs into Baltimore City facilities for healthcare.

## APPENDIX 6 | DETAILED PRIMARY DATA FINDINGS

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Primary data were collected through web-based Key Leader and Community surveys, and focus groups, which were conducted in-person or in a virtual format.

### Methodologies

The methodologies varied based on the type of primary data being analyzed. The following section describes the various methodologies used to analyze the primary data, along with key findings.

#### Focus Groups

The following 33 focus groups were conducted virtually, hybrid or in person between October 3, 2023 and November 8, 2023. These groups included representation from key leaders, non-profit partners, patients, and community members, and totaled more than 300 participants.

- Anchor Group
- Baltimore Medical System Case Managers
- BCHD HIV Services and Ryan White (two focus groups)
- BCHD Youth Advisory Council and Youth Ambassadors
- B'More for Healthy Babies
- CASA de Maryland (two focus groups)
- Catholic Charities' Esperanza Center
- Charm City Care Connection
- Druid Hill YMCA
- East Baltimore Faith Leaders
- Eastside Yo! (Historic East Baltimore Community Action Coalition)
- Health Care Access Maryland
- Health Care for the Homeless
- Healthy Start Father's Group
- Helping Up Mission
- J Van Story Branch Apartments
- MedStar Fetal Assessment Center
- Morgan State University's Nutrition in the Community Class
- Northeastern Community Organization
- Senior Network of North Baltimore
- Sinai Hospital Diabetes patients
- Sinai Hospital HIV Clinic patients
- Sinai Hospital Families with Children
- St. Agnes Community Council
- St. Agnes Patient Family Advisory Council
- The Mayor's Commission on Aging and Retirement Education
- UMMC Chronic Disease patients
- UMMC Cancer patients
- UMMC Community Engagement Committee
- Victory Village Senior Center
- Zeta Senior Center

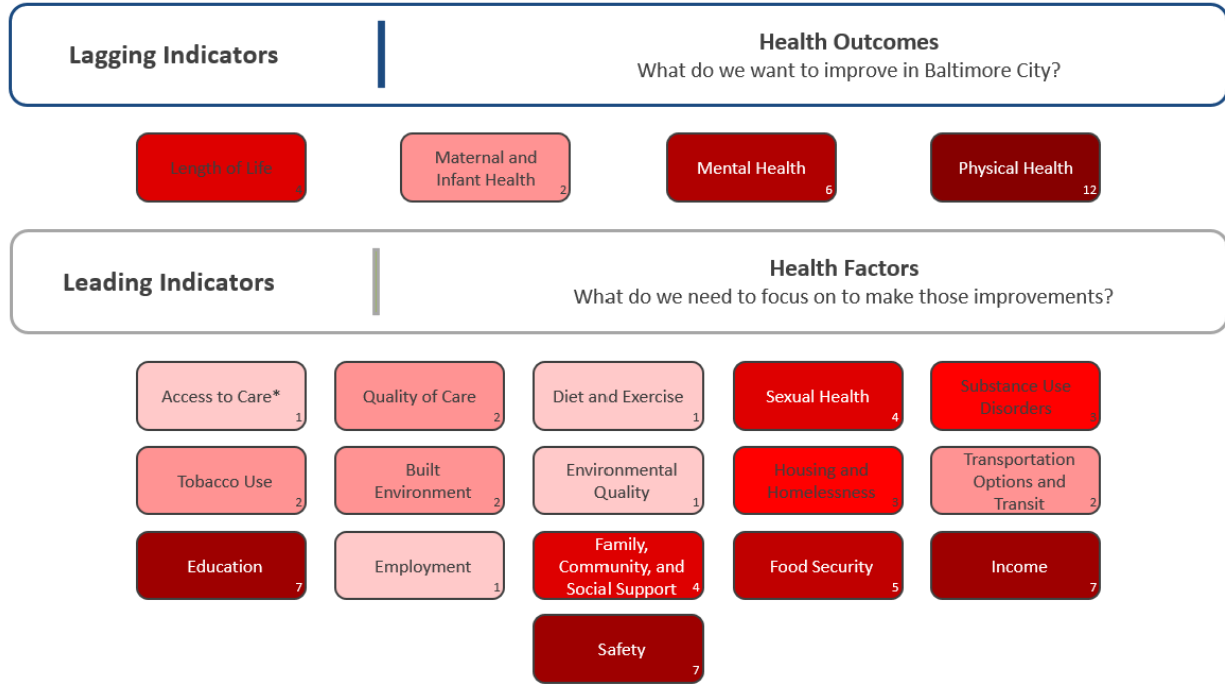
Input was gathered on the following topics:

- Community health concerns
- Access to care
- Social and environmental concerns that may impact community health

Key findings from the focus groups are summarized by topic in the graphic below.



## Focus Group Findings by Category



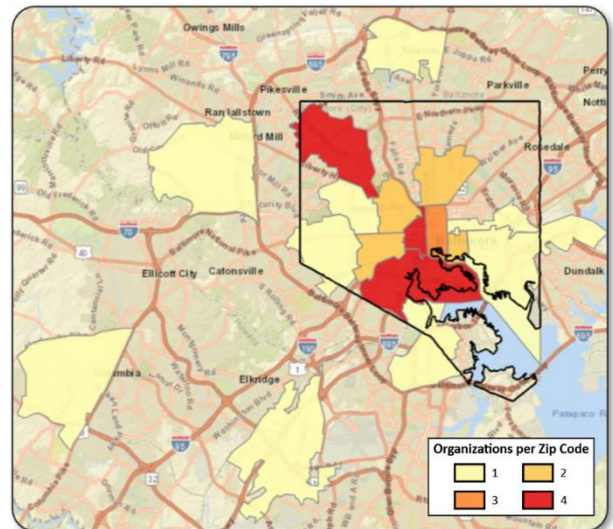
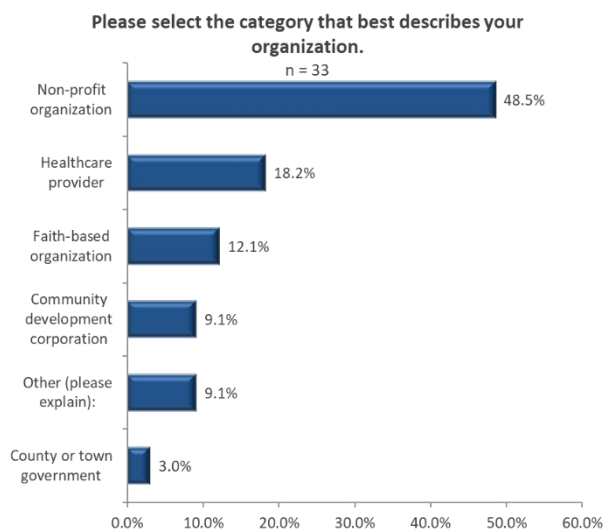
## Key Leader Web Survey

A total of 33 key leaders completed the web-based Key Leader Survey, which was live from September 5, 2023 to November 17, 2023.

Key leaders represented a variety of organizations with geographies throughout Baltimore City. Broad categories included:

- Not-for-profit partners
- Government officials
- Healthcare providers
- Academic partners
- First responders
- Business leaders

The chart below shows the distribution of Key Leader survey respondents by type of organization. The map below shows the geographic distribution of Key Leader survey respondents based on the ZIP code in which the organization they represent is located.



In general, survey questions focused on the following topics:

- Top community health needs of Baltimore City
- Top social drivers that impact health
- Availability of community resources
- Access to care (barriers to care and locations of care)
- Health literacy

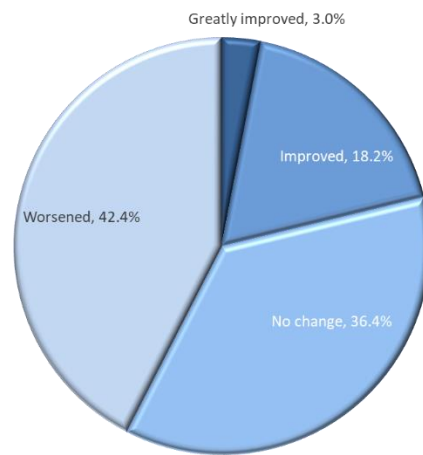
The key findings from the Key Leader Survey are detailed below:

- Key leaders identified the top 3 health needs of Baltimore City as: mental health/suicide, housing and food security.

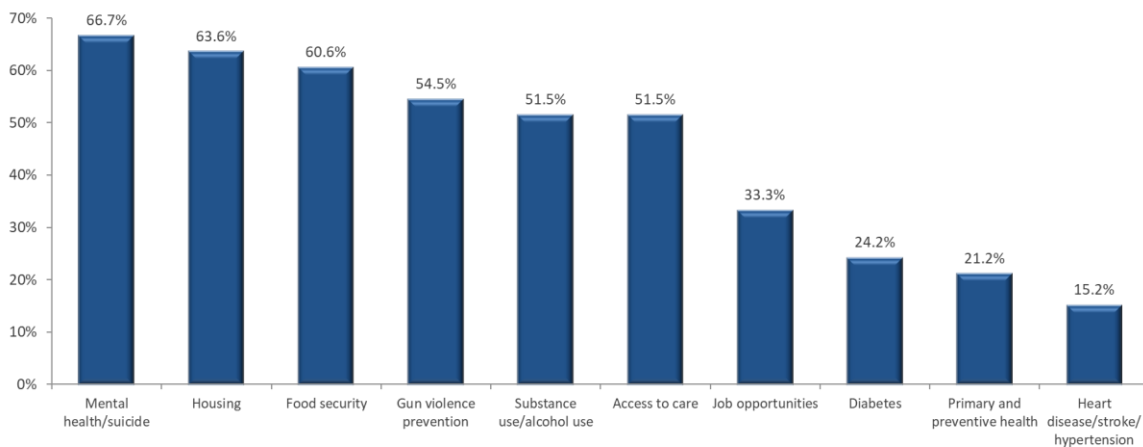
- Key leaders identified the following areas as having the most impact on health in the community: access to affordable housing, crime and violence, and access to healthy foods.
- Key leaders identified SDoH, cost of care and health literacy as the most significant barriers to care.
- Black or African American residents were identified as the community group in Baltimore City most in need of assistance.
- The most common suggestions for improving community health focused on improving affordability, awareness, and mental health resources, as well as increasing the presence of neighborhood clinics.

Charts detailing key findings from the Key Leader Survey are displayed below:

**Figure A6.1**  
How do you believe the health of the community you serve has changed over the past three years?  
n= 33

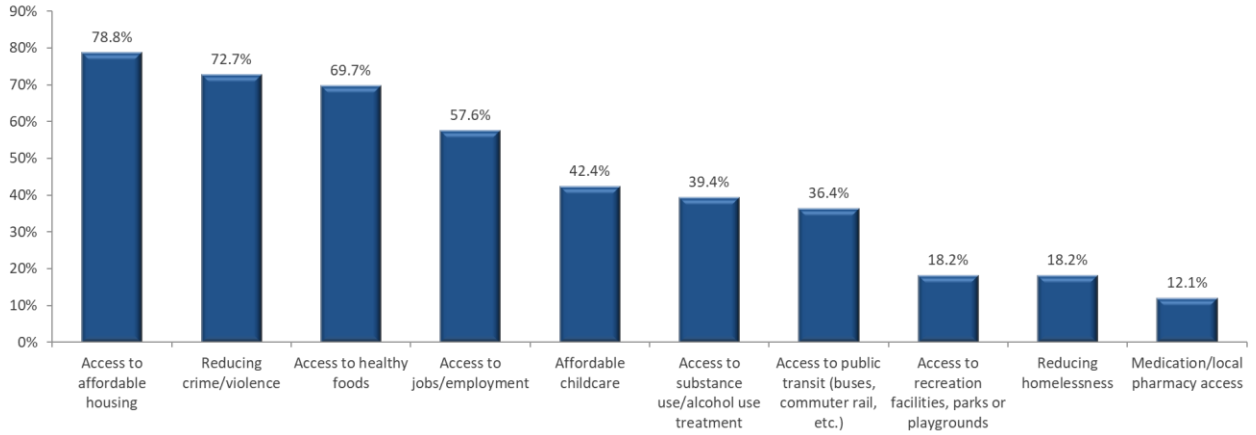


**Figure A6.2**  
Please select the top FIVE (5) community health needs of the City of Baltimore.  
n= 33



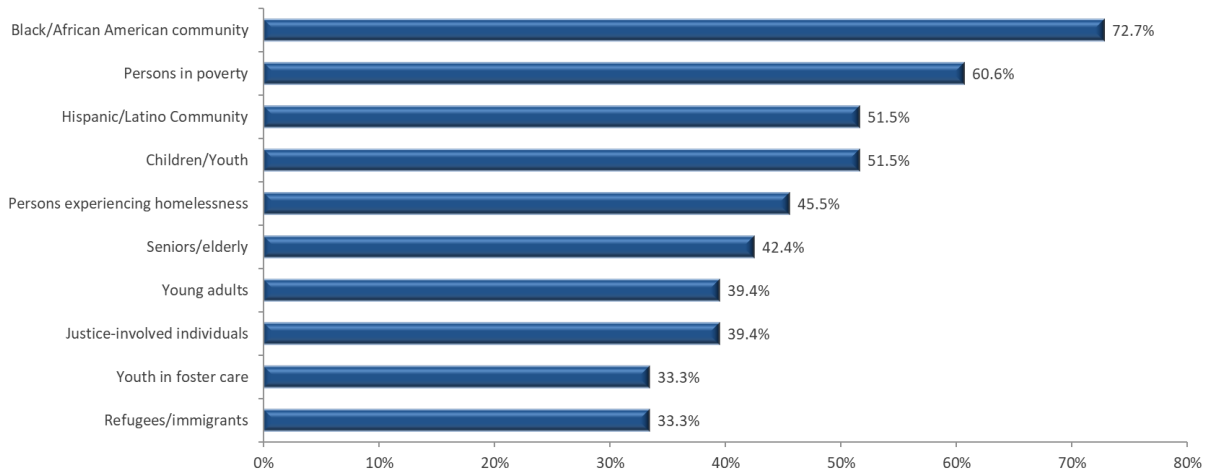
**Figure A6.3**

Please choose the top 5 social needs in the community you serve.  
n= 33

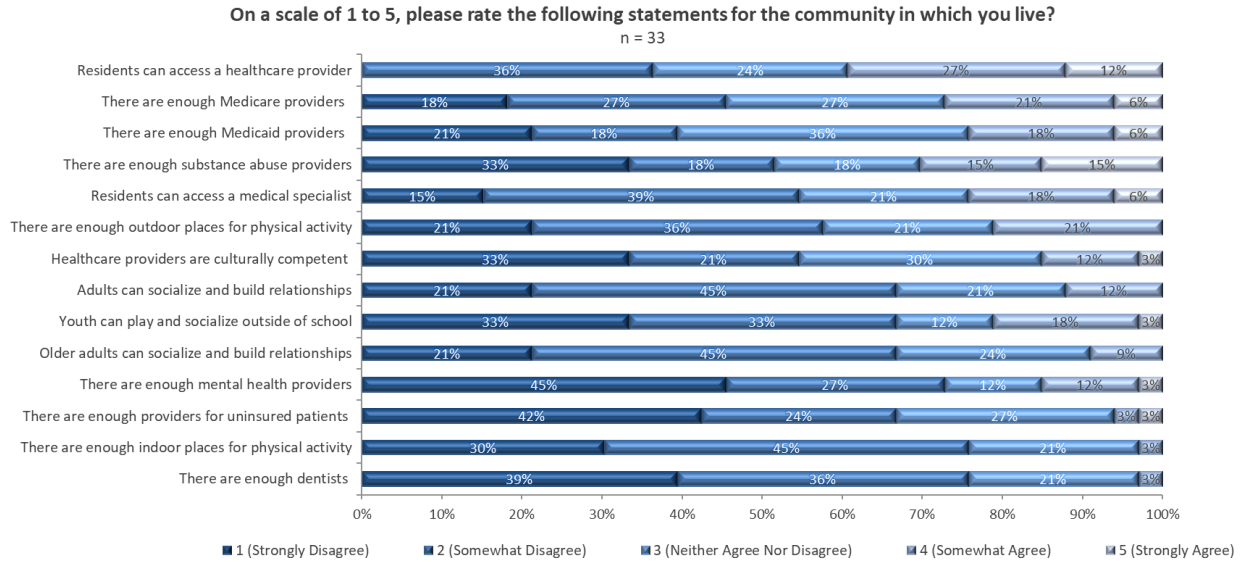


**Figure A6.4**

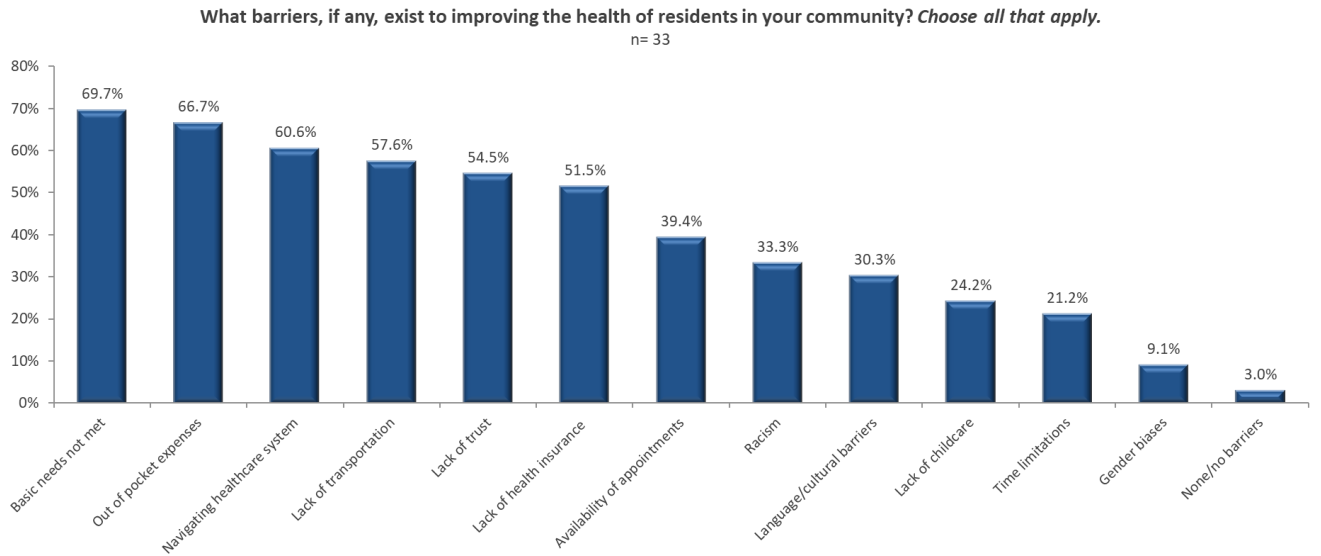
Choose the group(s) that needs more help in the community you serve. Choose all that apply.  
n= 33



**Figure A6.5**

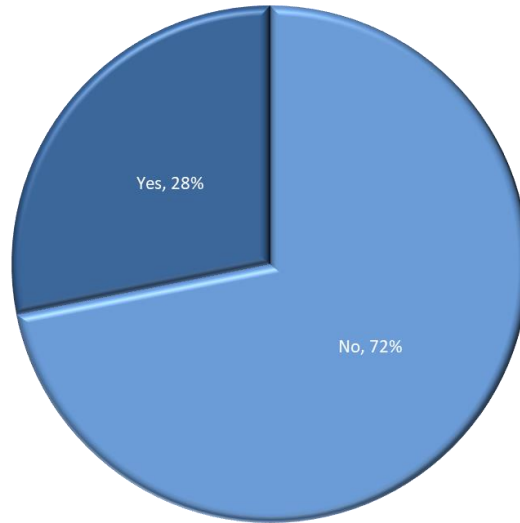


**Figure A6.6**



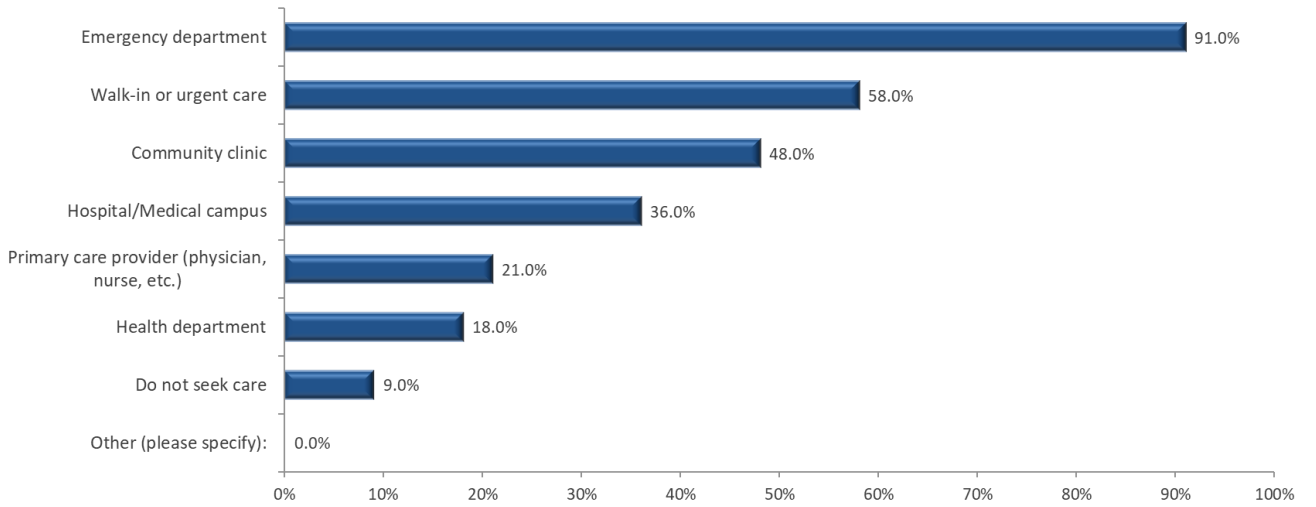
**Figure A6.7**

Do you feel that the residents of the community you serve are health literate? n = 33



**Figure A6.8**

Members of your community typically seek medical care through... Please select all that apply n= 33



The questions administered via the Key Leader Survey instrument are below:

**City of Baltimore | 2024 Key Community Health Leader Survey**

**1. Please select the category that best describes your organization.**

- a. Faith-based organization
- b. Non-profit organization
- c. Media
- d. County or town government
- e. Institute of higher education
- f. Healthcare provider
- g. Public – private partnership
- h. Community Development Corporation
- i. Other (please explain) \_\_\_\_\_

**2. What is the ZIP code of your organization/facility? Please write 5-digit ZIP code.**

\_\_\_\_\_

**3. How do you believe the health of the community you serve has changed over the past three years?**

- a. Greatly improved
- b. Improved
- c. No change
- d. Worsened
- e. Greatly worsened

- [if “Greatly improved” or “Improved”] In what way(s) has the health of the community you serve improved?
- [if “Greatly worsened” or “Worsened”] In what way(s) has the health of the community you serve worsened?

**4. From the list provided, please rank the top FIVE (5) community health needs of Baltimore City.**

- a. Access to Care
- b. Accidents (falls)
- c. Cancer
- d. Dental Health
- e. Diabetes
- f. Food security
- g. Gun violence prevention
- h. Heart Disease/Stroke/Hypertension
- i. Maternal/Infant Health
- j. Mental Health/Suicide
- k. Primary and Preventive Health Care
- l. Obesity
- m. Sexually Transmitted Disease

- n. Substance Use/Alcohol Use
- o. Tobacco and Electronic Smoking Devices
- p. Housing
- q. Uninsured
- r. Other (please explain)
- s. None
- t. Unsure/Do not know
- u. Prefer not to respond

**5. What resources are available in the community you serve to address the top health issues you identified?**

---

**6. Please share any additional information regarding these health issues and your reasons for ranking them this way.**

---

**7. In your opinion, which FIVE (5) of the following need the most improvement within the community you serve? If a need that requires the most improvement is not listed, please select "Other" and write it in.**

- a. Access to affordable housing
- b. Access to healthy foods
- c. Access to public transit (buses, commuter rail, etc.)
- d. Access to recreation facilities, parks or playgrounds
- e. Access to substance use/alcohol use treatment
- f. Affordable childcare
- g. Availability of alternative transportation options (biking, walking, carpooling, etc.)
- h. Improved air quality
- i. Improved water quality
- j. Medication/local pharmacy access
- k. Reducing homelessness
- l. Reducing crime/violence
- m. Language/Immigrant services
- n. Other (please explain)
- o. None
- p. Unsure/Do not know
- q. Prefer not to respond

**8. Please share any additional information regarding these needs and your reasons for prioritizing them.**

---

**9. In your opinion, which population sub-group(s) has the greatest need for additional resources within the community you serve? Please select all that apply. If a population sub-group that needs additional resources is not listed, please select "Other" and write it in.**

- a. Black/African American community
- b. Children/Youth
- c. Hispanic/Latino community
- d. LGBTQIA+ community
- e. Justice-involved individuals
- f. Persons experiencing homelessness
- g. Persons in poverty
- h. Persons with disabilities
- i. Refugees/Immigrants
- j. Seniors/Elderly
- k. Uninsured population
- l. Women in pregnancy
- m. Young adults
- n. Youth in foster care
- o. Other (please explain) \_\_\_\_\_
- p. None
- q. Unsure/Do not know
- r. Prefer not to respond

**10. Please share any additional information regarding these population sub-group(s) and your reasons for choosing them.**

---

**11. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Residents can access a doctor, including nurse practitioners and physician assistants (Family/General Practitioner, Ob/Gyn, Pediatrician) when needed.
- b. Residents can access a medical specialist (Cardiologist, Dermatologist, etc.) when needed.
- c. There are enough providers accepting Medicaid in the community.
- d. There are enough providers accepting Medicare in the community.
- e. There are enough providers accepting patients without insurance in the community.
- f. There are enough dentists in the community.
- g. There are enough culturally competent healthcare providers in the community.
- h. There are enough mental health providers in the community.
- i. There are enough substance abuse treatment providers in the community.

**12. From the list provided, where do you feel most members of the community you serve most often seek medical care? Choose all that apply.**

- a. Community Clinic
- b. Hospital/Medical Campus
- c. Emergency Department
- d. Walk-in or Urgent Care
- e. Primary care provider (physician, nurse, etc.)
- f. Health department
- g. Other (please specify): \_\_\_\_\_

h. Do not seek care

**13. Why do you think members of the community you serve primarily seek care in the location(s) you selected above?** \_\_\_\_\_

**14. What are the most significant barriers that keep people in the community you serve from accessing healthcare when they need it? Choose all that apply.**

- a. Availability of providers/ appointments
- b. Basic needs not met (food/shelter)
- c. Gender biases
- d. Inability to navigate healthcare system
- e. Inability to pay out of pocket expenses (co pays, prescriptions)
- f. Lack of/limited childcare
- g. Lack of health insurance coverage
- h. Lack of/limited transportation
- i. Lack of trust
- j. Language/cultural barriers
- k. Racism
- l. Time limitations
- m. None/no barriers
- n. Other: \_\_\_\_\_

**15. Please share any additional information regarding these barriers and your reasons for choosing them.** \_\_\_\_\_

**16. Do you believe health and social needs are similar across Baltimore City?**

- a. Yes
- b. No
- c. Prefer not to answer

• [If “No”]:

- **In your opinion, which geographic areas experience the greatest level of need?**

\_\_\_\_\_

- **Please describe any unique health and social needs you have observed within these areas:**

\_\_\_\_\_

**17. What challenges do older adults face in the community you serve?**

\_\_\_\_\_

**18. Do you feel that the people in the community you serve are health literate, or able to understand health-related information?**

- a. Yes
- b. No
- c. Prefer not to answer

**19. What strategies do you find most effective in communicating information related to health or social needs to members of the community you serve?**

---

**20. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. There are enough indoor places to get regular exercise or physical activity in the community you serve.
  - [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.
- b. There are enough outdoor places to get regular exercise or physical activity in the community you serve.
  - [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.

**21. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Children and youth living in the community you serve have access to places to play and socialize outside of school.
  - [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in children/youth in the community you serve?
- b. Adults in the community you serve have access to places to socialize and build relationships outside of work or home.
  - [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in adults in the community you serve?
- c. Older adults in the community you serve have access to places to socialize and build relationships outside of the home.
  - [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in older adults in the community you serve?

**22. Have you already gotten, or do you plan to get, your annual flu shot?**

- a. Yes
- b. No
- c. Prefer not to answer

**23. What ideas or suggestions do you have to improve health in the community you serve?**

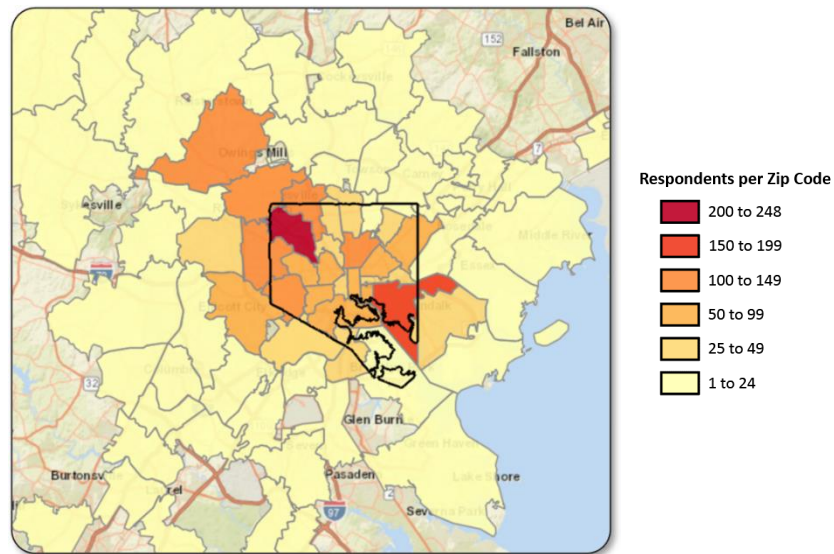
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**Thank you for completing the survey!**

## Community Survey

A total of 2,282 web-based surveys were completed by individuals living, working or receiving healthcare in the Baltimore City community. For the sake of accessibility, the survey was available in both English and Spanish. Approximately 13% of the surveys were completed in Spanish. Consistent with one of the survey process goals, survey community member respondents were representative of a broad geographic area encompassing areas throughout the city. The map below provides additional information on survey respondents' ZIP code of residence.

**Figure A6.9: Survey Respondents by Zip Code of Residence**



In general, survey questions focused on:

- Community health problems and concerns
- Community social/environmental problems and concerns
- Access to healthcare
  - Barriers to care
  - Health insurance status
  - Locations of care
  - Telehealth
  - Pediatric care

The key findings from the Community Survey are detailed below:

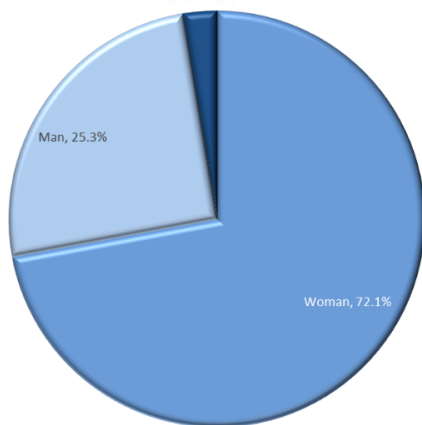
- Community members identified the top 3 health needs of Baltimore City as substance use, high blood pressure and diabetes.
- Relative to areas that have the most impact on health, community members mentioned: access to healthy foods, and violence and safety.
- Community members identified cost of care as the largest barrier to health in the community.

- The most common suggestions for improving community health were increasing affordability, awareness, childcare, transportation, mental health resources, community programming, education, and language support, as well as increasing the number of neighborhood clinics and decreasing violence.

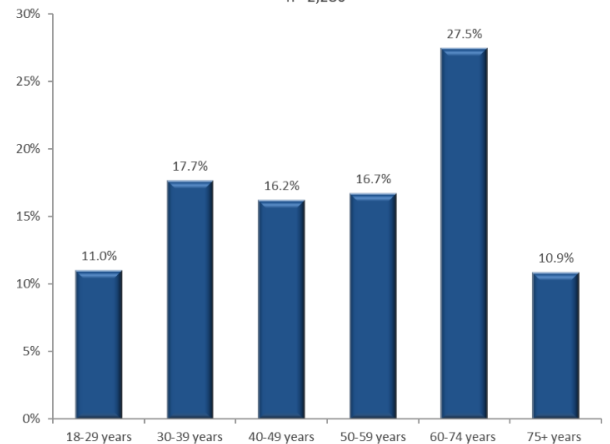
Charts detailing key findings from the Community Member Survey are displayed below:

**Figure A6.10**

What term best expresses how you describe your gender identity?  
n= 2,282

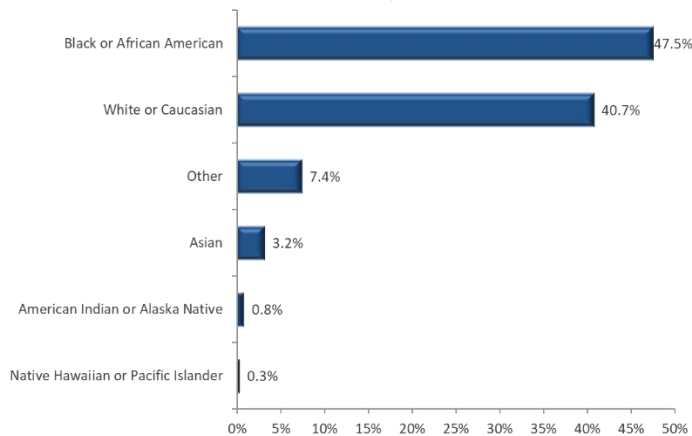


What is your age?  
n= 2,280

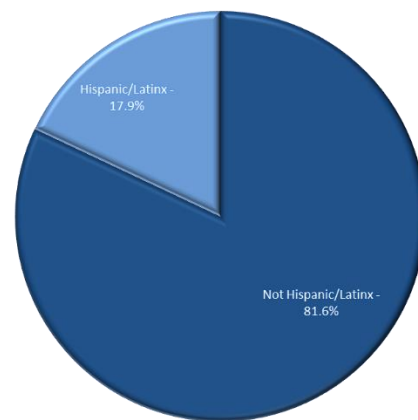


**Figure A6.11**

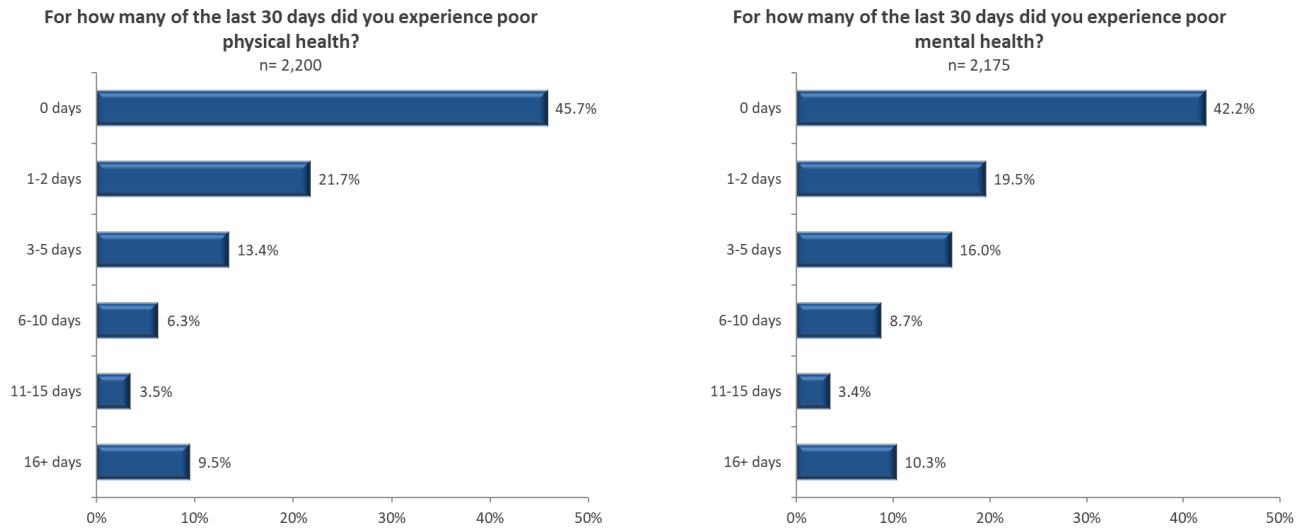
What is your race?  
n= 2,165



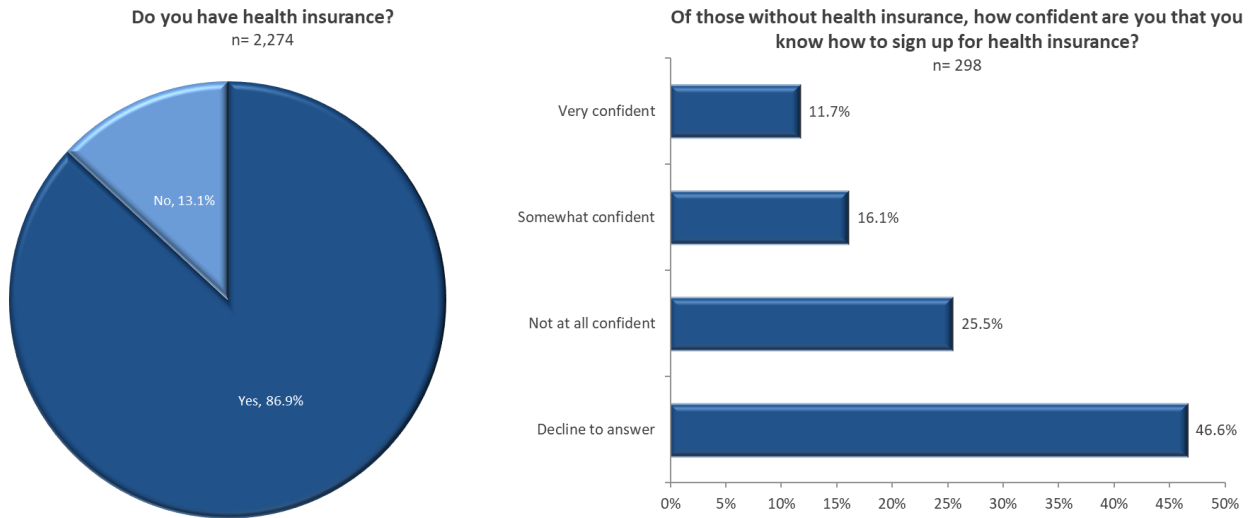
What is your ethnicity?  
n= 2,213



**Figure A6.12**

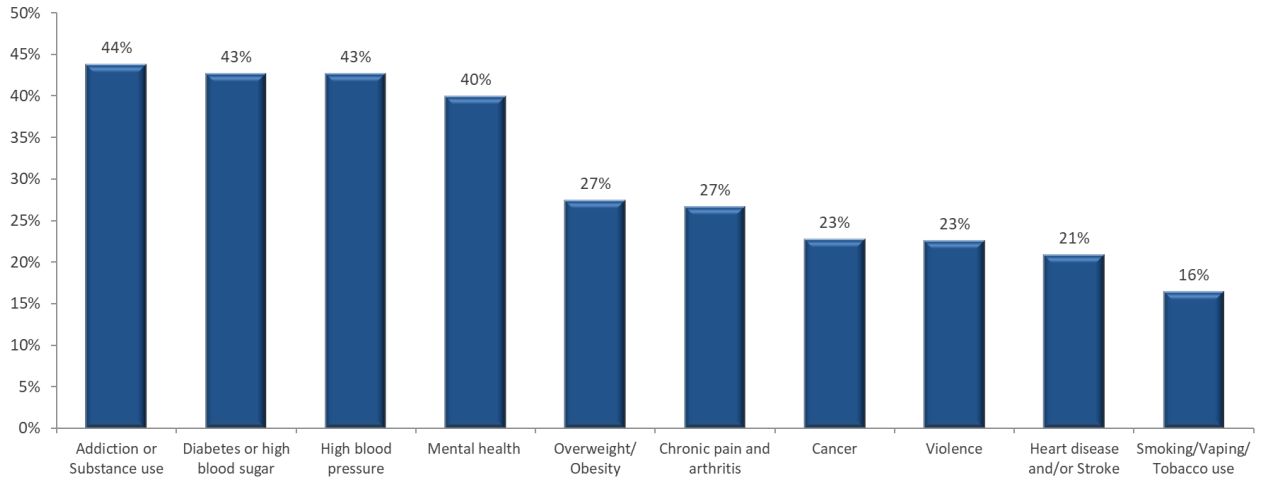


**Figure A6.13**



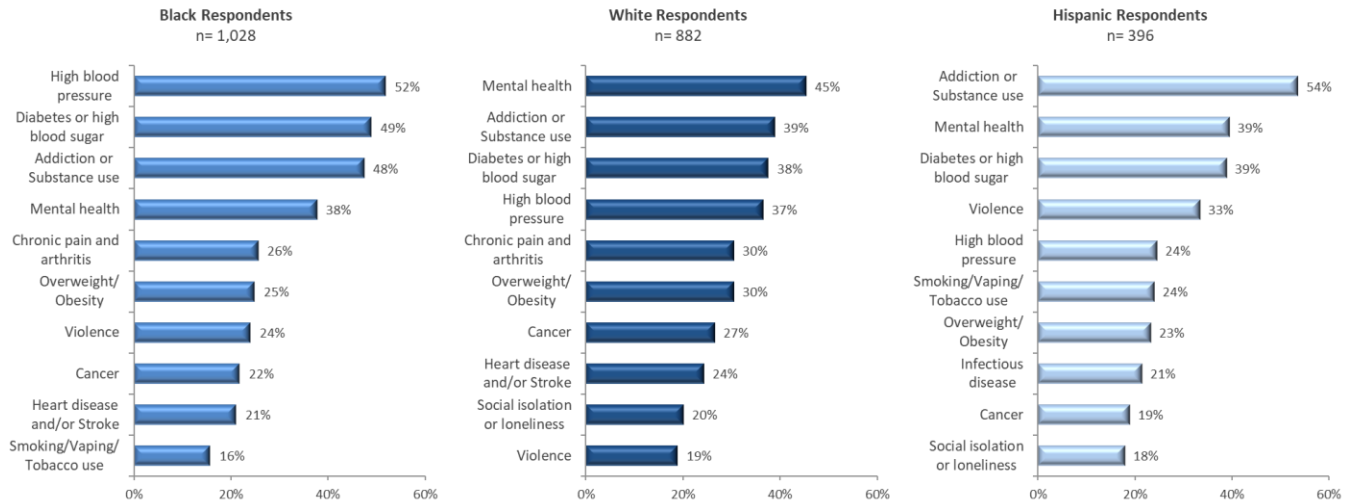
**Figure A6.14**

Please select the top FIVE (5) community health needs of Baltimore City.  
n= 2,280

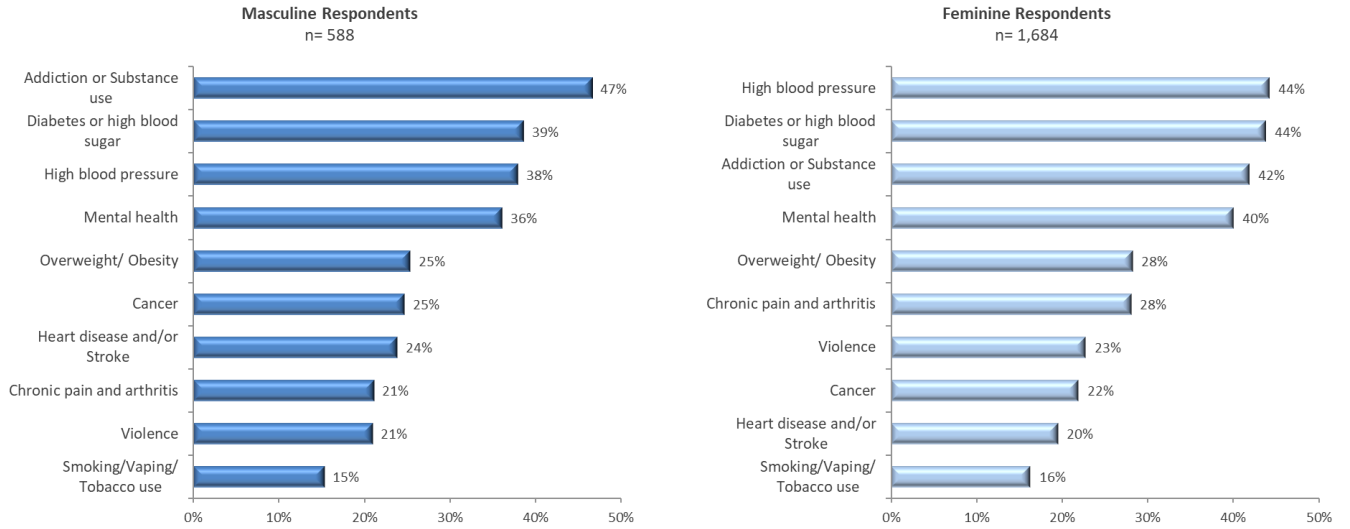


**Figure A6.15**

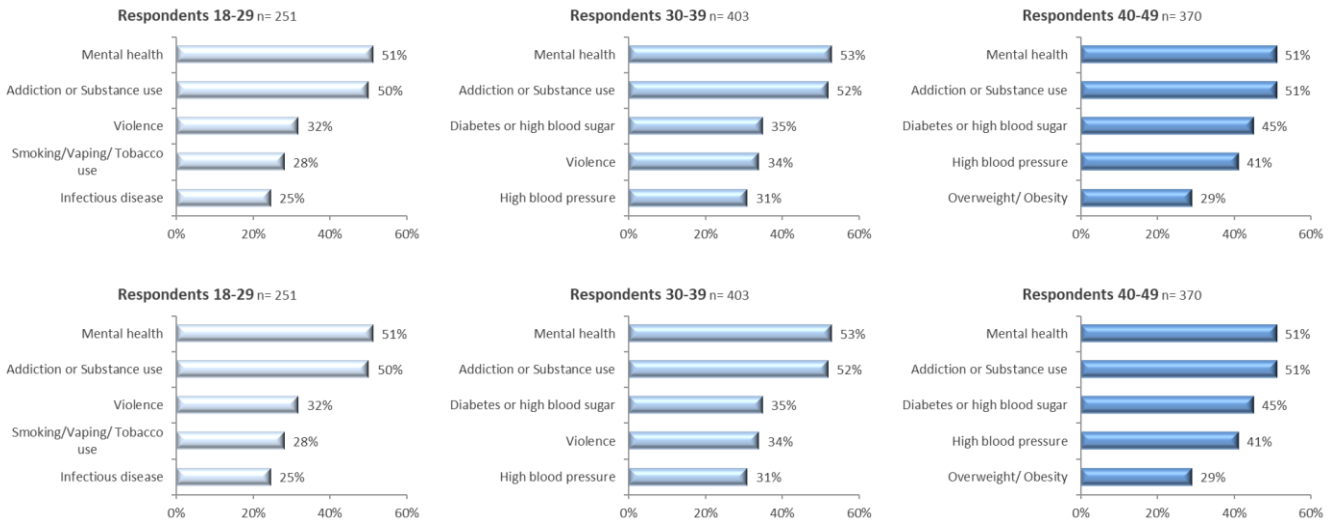
Please select the top FIVE (5) community health needs of Baltimore City.



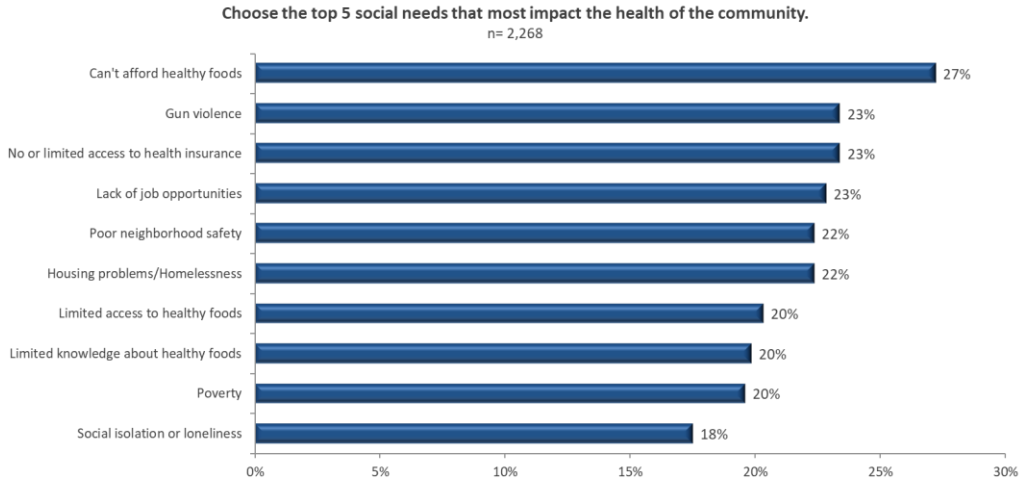
**Figure A6.16**



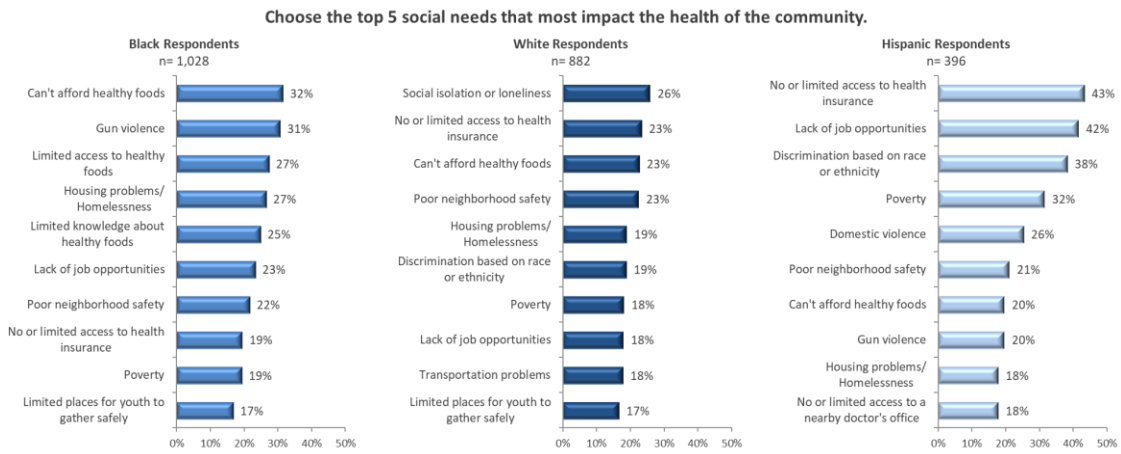
**Figure A6.17**



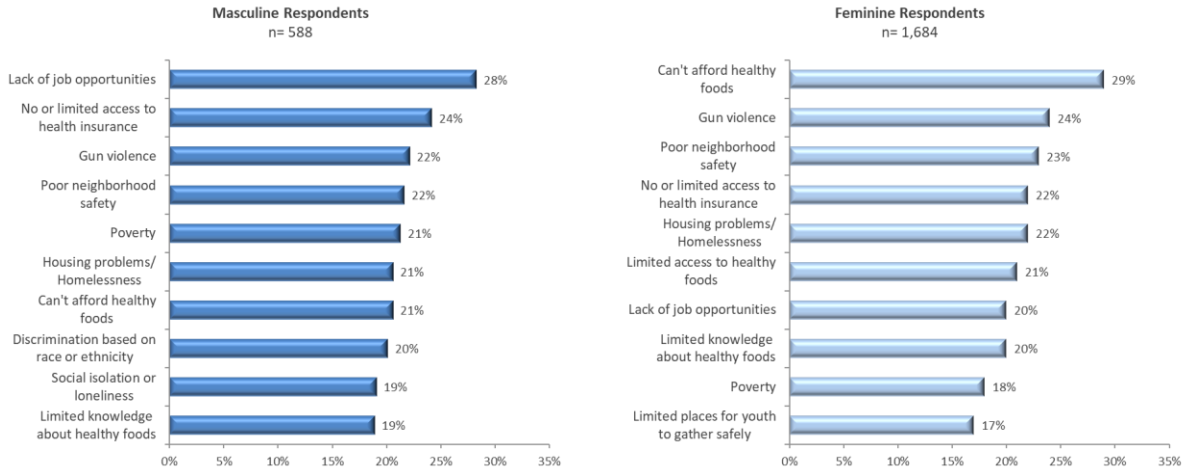
**Figure A6.18**



**Figure A6.19**

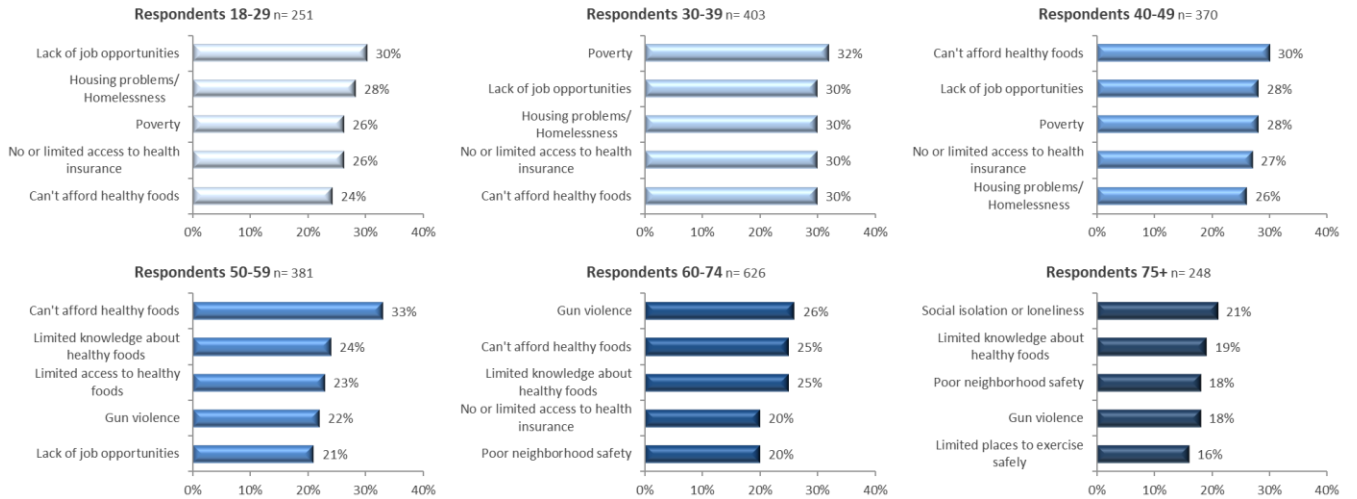


**Figure A6.20**



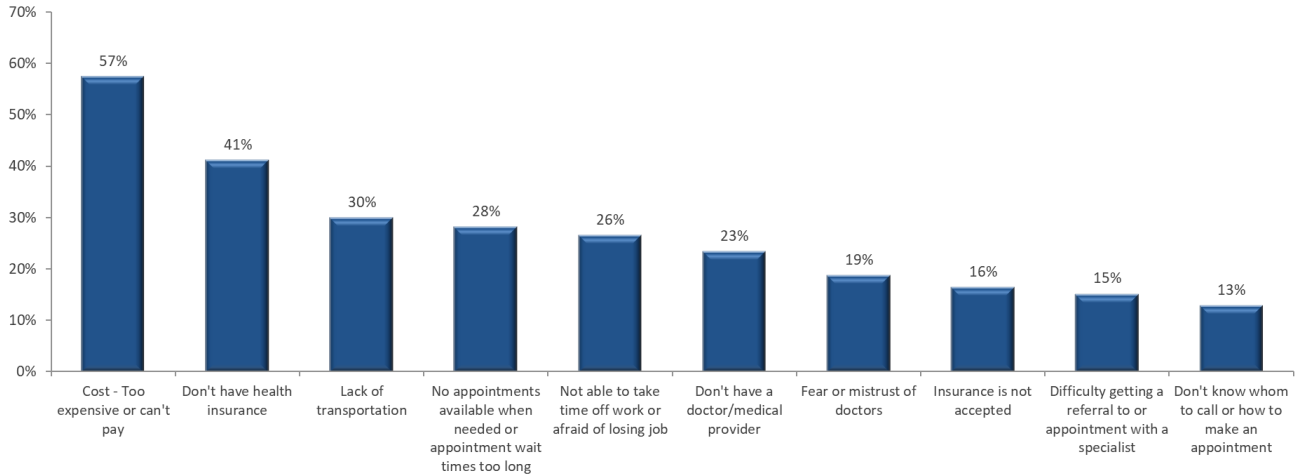
**Figure A6.21**

**Choose the top 5 social needs that most impact the health of the community.**



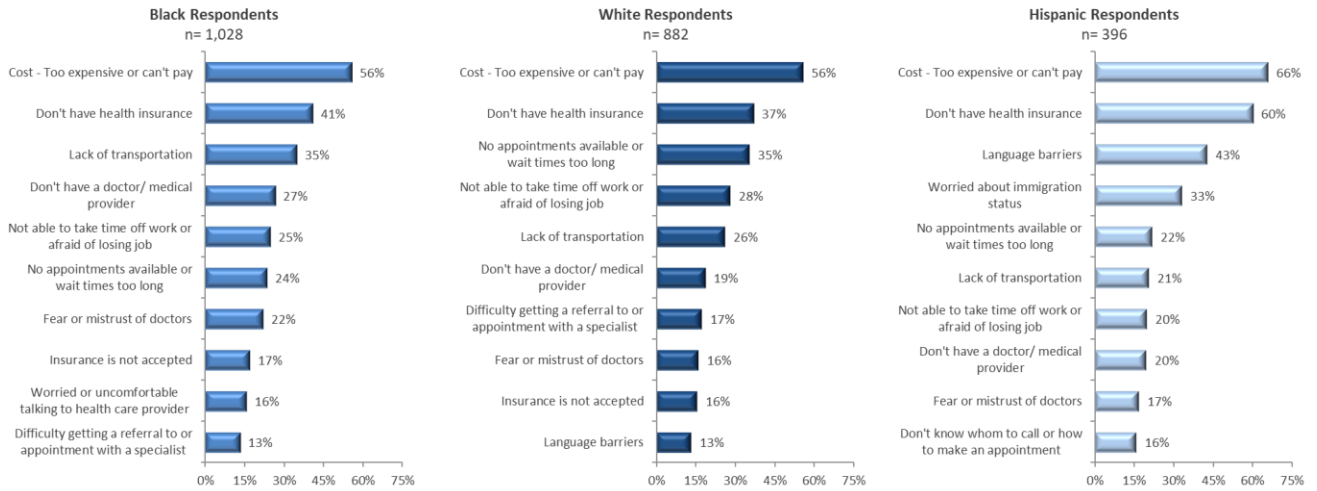
**Figure A6.22**

What barriers, if any, exist to improving the health of Baltimore City residents? Choose all that apply.  
n= 2,268

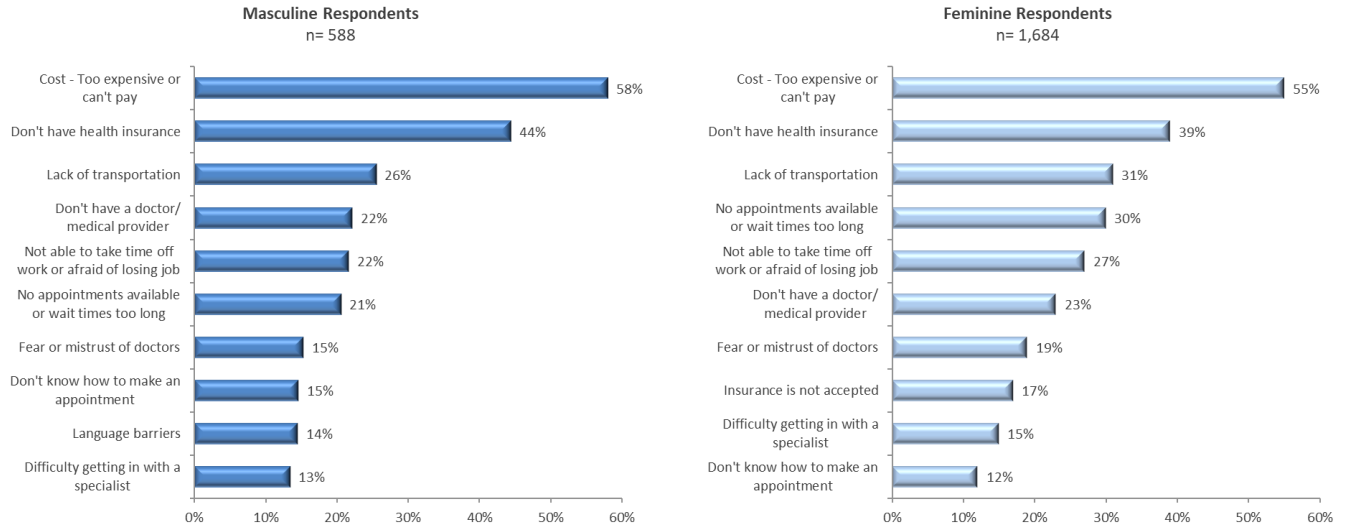


**Figure A6.23**

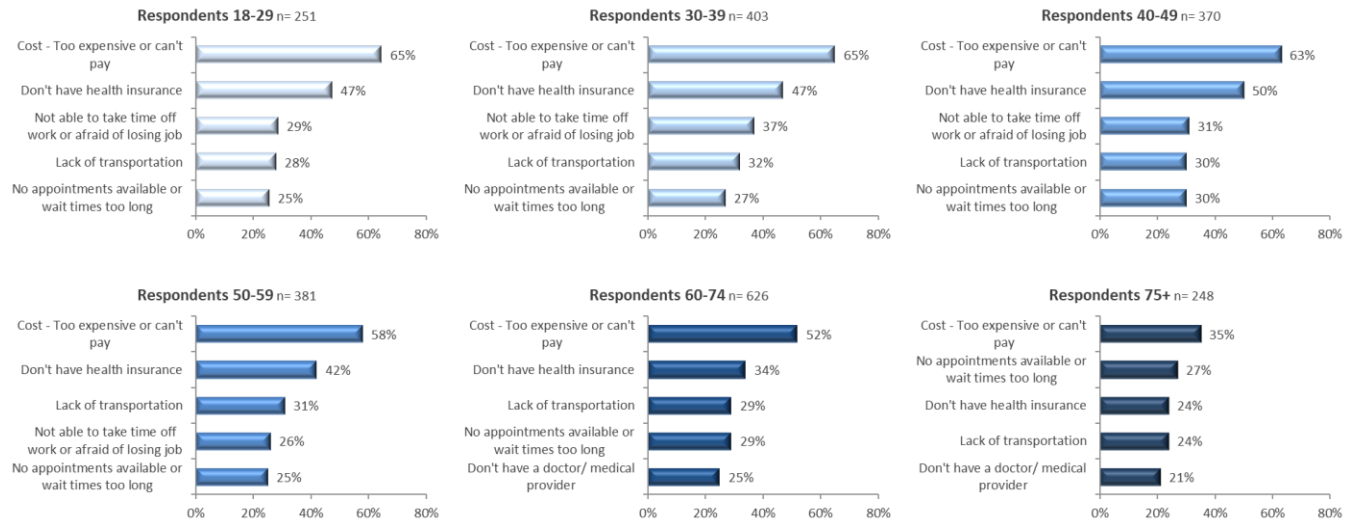
What barriers, if any, exist to improving the health of Baltimore City residents? Choose all that apply.



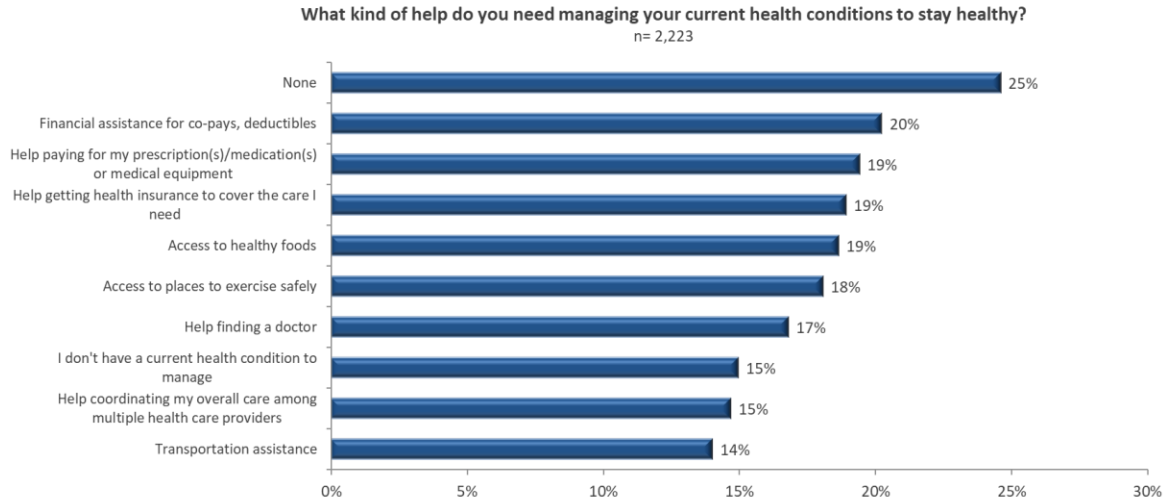
**Figure A6.24**



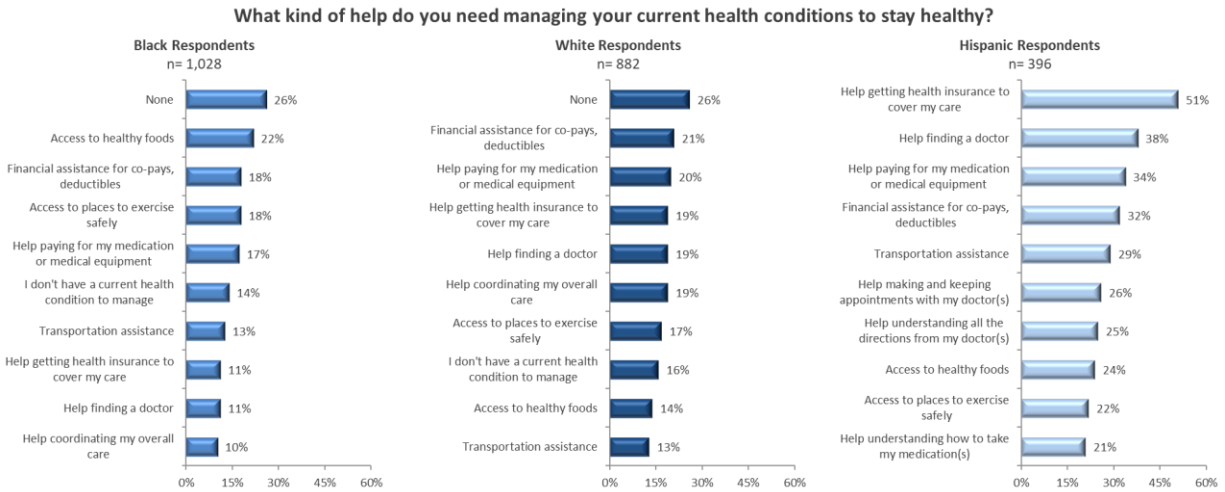
**Figure A6.25**



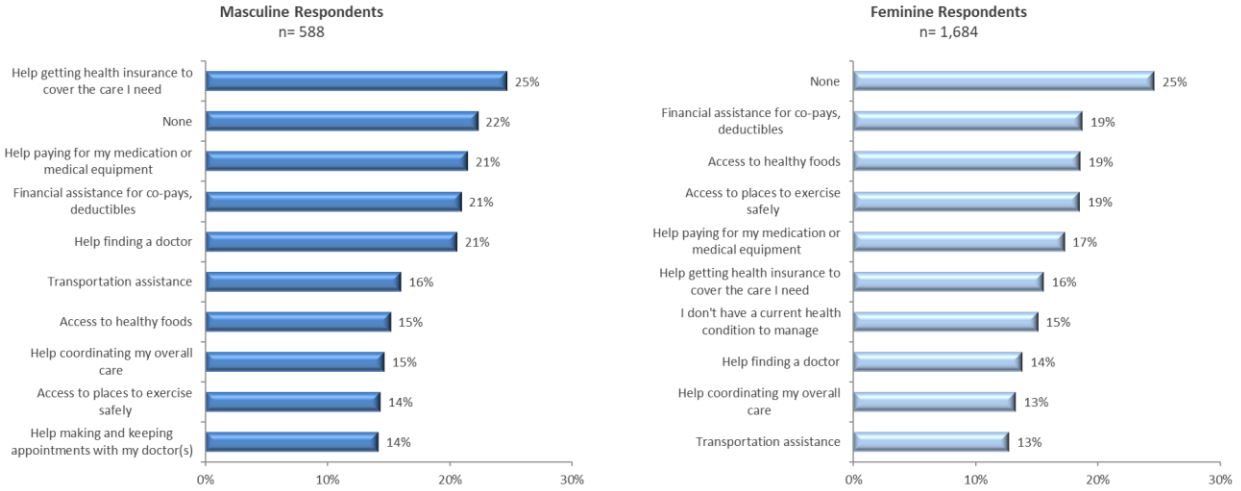
**Figure A6.26**



**Figure A6.27**

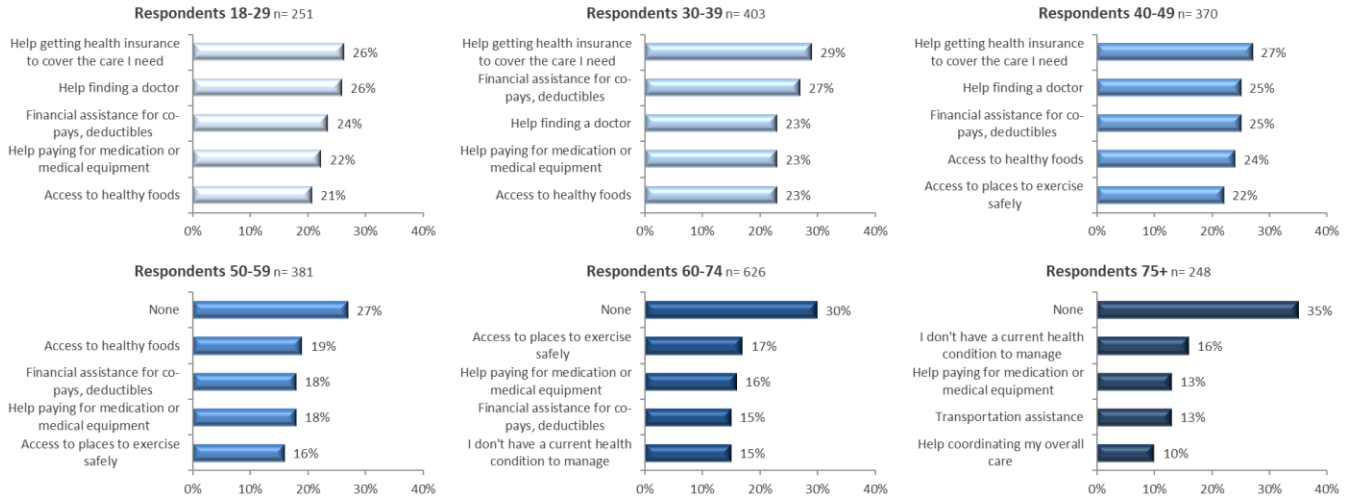


**Figure A6.28**

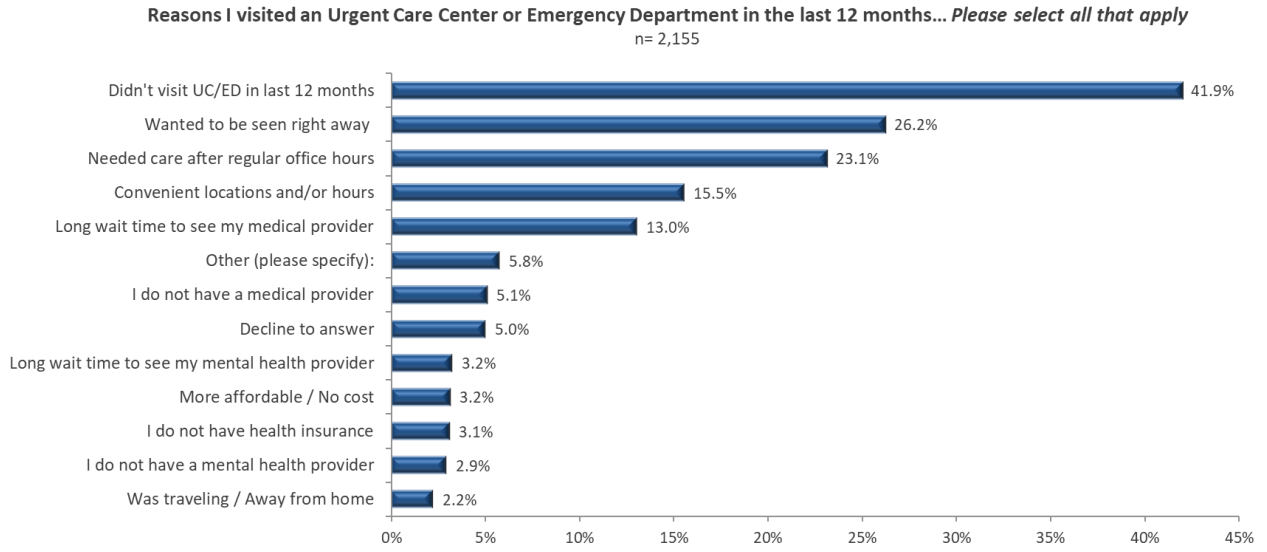


**Figure A6.29**

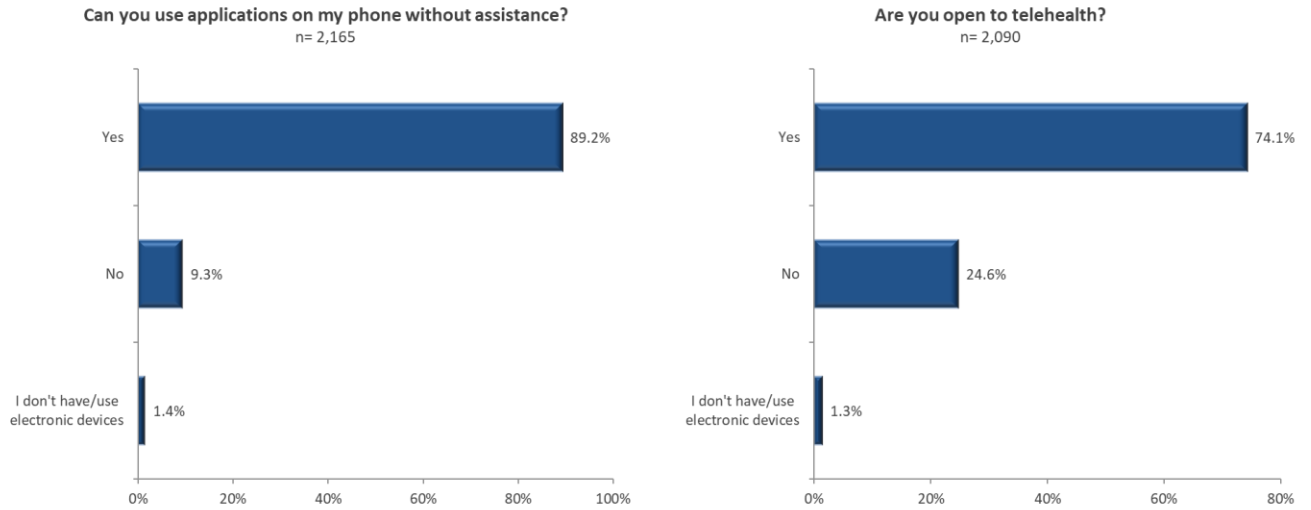
**What kind of help do you need managing your current health conditions to stay healthy?**



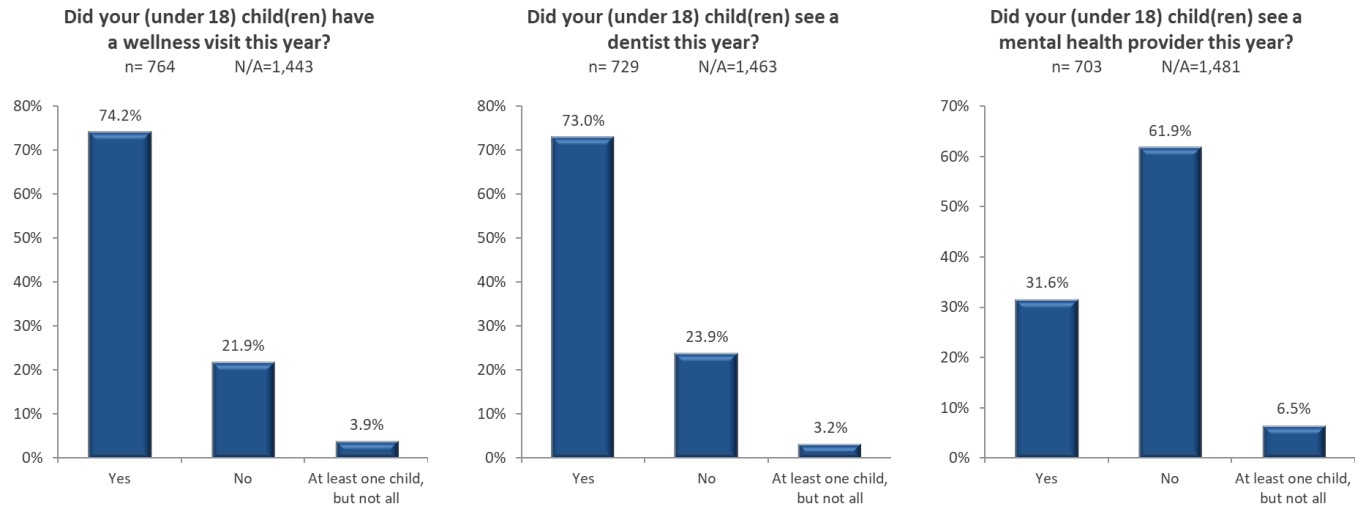
**Figure A6.30**



**Figure A6.31**



**Figure A6.32**



The questions administered via the Community Member Survey instrument are below:

**1. What is your ZIP code?**

Please write 5-digit ZIP code. \_\_\_\_\_

**2. Which neighborhood do you live in?**

Please select one of the options listed.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Allendale/Irvington/S. Hilton     | <input type="checkbox"/> Greater Roland Park/Poplar Hill   | <input type="checkbox"/> Patterson Park North & East            |
| <input type="checkbox"/> Beechfield/Ten Hills/West Hills   | <input type="checkbox"/> Greater Rosemont                  | <input type="checkbox"/> Penn North/Reservoir Hill              |
| <input type="checkbox"/> Belair-Edison                     | <input type="checkbox"/> Greentown/Bayview                 | <input type="checkbox"/> Pigtown/Carroll Park                   |
| <input type="checkbox"/> Brooklyn/Curtis Bay/Hawkins Point | <input type="checkbox"/> Hamilton                          | <input type="checkbox"/> Pimlico/Arlington/Hilltop              |
| <input type="checkbox"/> Canton                            | <input type="checkbox"/> Hamilton Hills                    | <input type="checkbox"/> Poppleton/The Terraces/ Hollins Market |
| <input type="checkbox"/> Cedonia/Frankford                 | <input type="checkbox"/> Hampden/Remington                 | <input type="checkbox"/> Sandtown-Winchester/ Harlem Park       |
| <input type="checkbox"/> Cherry Hill                       | <input type="checkbox"/> Harbor East/Little Italy          | <input type="checkbox"/> South Baltimore                        |
| <input type="checkbox"/> Chinquapin Park/Belvedere         | <input type="checkbox"/> Highlandtown                      | <input type="checkbox"/> Southeastern                           |
| <input type="checkbox"/> Clifton-Berea                     | <input type="checkbox"/> Howard Park/West Arlington        | <input type="checkbox"/> Southern Park Heights                  |
| <input type="checkbox"/> Cross-Country/Cheswolde           | <input type="checkbox"/> Inner Harbor/Federal Hill         | <input type="checkbox"/> Southwest Baltimore                    |
| <input type="checkbox"/> Dickeyville/Franklinton           | <input type="checkbox"/> Loch Raven                        | <input type="checkbox"/> The Waverlies                          |
| <input type="checkbox"/> Dorchester/Ashburton              | <input type="checkbox"/> Madison/East End                  | <input type="checkbox"/> Upton/Druid Heights                    |
| <input type="checkbox"/> Downtown/Seton Hill               | <input type="checkbox"/> Midtown                           | <input type="checkbox"/> Westport/Mount Winans/ Lakeland        |
| <input type="checkbox"/> Edmondson Village                 | <input type="checkbox"/> Midway/Coldstream                 | <input type="checkbox"/> Other ( <i>please specify</i> ):       |
| <input type="checkbox"/> Fells Point                       | <input type="checkbox"/> Morrell Park/Violetville          | _____   |
| <input type="checkbox"/> Forest Park/Walbrook              | <input type="checkbox"/> Mount Washington/Coldspring       | <input type="checkbox"/> Don't know                             |
| <input type="checkbox"/> Glen-Fallstaff                    | <input type="checkbox"/> North Baltimore/Guilford/Homeland | <input type="checkbox"/> Decline to answer                      |
| <input type="checkbox"/> Greater Charles Village/Barclay   | <input type="checkbox"/> Northwood                         |   |
| <input type="checkbox"/> Greater Govans                    | <input type="checkbox"/> Oldtown/Middle East               |   |
| <input type="checkbox"/> Greater Lauraville                | <input type="checkbox"/> Oliver/Johnson Square             |   |
| <input type="checkbox"/> Greater Mondawmin                 | <input type="checkbox"/> Orchard Ridge/Armistead           |   |

**3. What is your age group (years)?**

*Please select one.*

- 18-29
- 30-39
- 40-49
- 50-59
- 60-74
- 75+
- Don't know
- Decline to answer

**4. What is your race?**

*Please select all that apply.*

- Black or African American
- Native Hawaiian or Other Pacific Islander
- American Indian or Alaska Native
- White or Caucasian
- Asian
- Other, *specify* \_\_\_\_\_
- Don't know
- Decline to answer

**5. Are you Hispanic or Latino/a?**

*Please select one.*

- Yes
- No
- Don't know
- Decline to answer

**6. Do you think of yourself as:**

*Please select one.*

- Male
- Female
- Transgender man
- Transgender woman
- Gender queer/gender nonconforming, i.e., neither exclusively male nor female
- Additional gender category (or other) (*please specify*): \_\_\_\_\_
- Don't know
- Decline to answer

**8. Do you think of yourself as:**

*Please select one.*

- Straight or heterosexual
- Lesbian or Gay
- Bisexual
- Queer
- Pansexual
- Questioning
- Something else (*please specify*): \_\_\_\_\_
- Don't know
- Decline to answer

**9. Do you have health insurance?**

*Please select one.*

- Yes
- No
- Don't know
- Decline to answer

**10. If you don't have health insurance, how confident do you feel about knowing how to sign up for health insurance coverage?**

*Please select one.*

- I have health insurance
- Very confident
- Somewhat confident
- Not at all confident
- Don't know
- Decline to answer

**11. Thinking about your physical health, which includes physical illness and injury, about how many days during the past 30 days was your physical health not good?**

*Please select one.*

- None
- 1-2 days
- 3-5 days
- 6-10 days
- 11-15 days
- 16 or more days
- Don't know
- Decline to answer

**12. Thinking about your mental health, which includes stress, depression, and problems with emotions, about how many days during the past 30 days was your mental health not good?**

*Please select one.*

- None
- 1-2 days
- 3-5 days
- 6-10 days
- 11-15 days
- 16 or more days
- Don't know
- Decline to answer

**13. What do you think are the top 5 health issues that affect people the most in the neighborhood where you live? Please select up to five.**

- Addiction/Substance use
- Alzheimer's Disease/dementia
- Cancer
- Children with illnesses
- Chronic pain & arthritis
- Diabetes/High blood sugar
- Falls
- Heart disease/Stroke
- High blood pressure
- HIV/AIDS
- Infant death
- Infectious disease (e.g., COVID, flu, hepatitis)
- Lung disease/Asthma/COPD
- Maternal health/Reproductive health
- Mental health (e.g., depression, anxiety, suicide, PTSD, trauma)
- Overweight / Obesity
- Preventable injuries
- Sexually transmitted infections
- Smoking/ Vaping/Tobacco use
- Social isolation / Loneliness
- Violence
- Other (please specify):

- 
- None
  - Don't know
  - Decline to answer

**14. What do you think are the top 5 social/environmental problems that affect the health of people the most in the neighborhood where you live? Please select up to five.**

- No or limited access to a nearby doctor's office
- No or limited access to health insurance
- Domestic violence
- Limited knowledge about healthy foods
- Limited access to healthy foods
- Can't afford healthy foods
- Limited access to/can't afford any food
- School dropout/Poor schools
- Lack of job opportunities
- Racial/Ethnicity discrimination
- Social isolation/Loneliness
- Child abuse/Neglect
- Elder abuse/Neglect
- Lack of affordable childcare
- Housing problems/Homelessness
- Poor neighborhood safety
- Gun violence
- Poverty
- Limited places to exercise safely
- Limited places for youth to gather safely
- Transportation problems
- Other (please specify): \_\_\_\_\_
- None
- Don't know
- Decline to answer

**15. What are the top 5 reasons people in your neighborhood *do not get* health care when they need it?**

*Please select up to five.*

- Cost – Too expensive / Can't pay
- Don't have health insurance
- Insurance is not accepted
- Don't have a doctor/medical provider
- No doctor/medical provider nearby
- Don't know whom to call or how to make an appointment
- No appointments available when needed/Wait for an appointment is too long
- Lack of transportation
- Lack of / Limited childcare
- Language barrier
- Worried about immigration status
- Fear or mistrust of doctors
- Difficulty getting a referral to or appointment with a specialist
- Not able to take time off work/Afraid of losing job
- Worried or uncomfortable telling a health care provider about my health problem
- Cultural / Religious beliefs
- Other (*please specify*): \_\_\_\_\_
- People do not have any issues accessing health care
- None
- Don't know
- Decline to answer

**16. What kind of help do you need managing your current health conditions (for example, heart conditions, high blood pressure, stroke, diabetes, asthma, cancer, COPD, congestive heart failure, arthritis, HIV, depression, anxiety, other mental health condition, etc.) to stay healthy?**

*Please choose all that apply.*

- |  |  |
|--|--|
| <input type="checkbox"/> I don't have a current health condition to manage                     | <input type="checkbox"/> Help coordinating my overall care among multiple health care providers                                      |
| <input type="checkbox"/> Help getting health insurance to cover the care I need                | <input type="checkbox"/> Access to healthy foods   |
| <input type="checkbox"/> Help finding a doctor   | <input type="checkbox"/> Access to places to exercise safely   |
| <input type="checkbox"/> Help making and keeping appointments with my doctor(s)                | <input type="checkbox"/> Transportation assistance   |
| <input type="checkbox"/> Help understanding all the directions from my doctor(s)               | <input type="checkbox"/> Financial assistance for co-pays, deductibles   |
| <input type="checkbox"/> Help understanding how to take my medication(s)                       | <input type="checkbox"/> Home modification assistance (for example, installing a wheelchair ramp or a handicapped-accessible shower) |
| <input type="checkbox"/> Help paying for my prescription(s)/medication(s) or medical equipment | <input type="checkbox"/> Other ( <i>please specify</i> ): _____  |
| <input type="checkbox"/> Health care in my home  | <input type="checkbox"/> None  |
|  | <input type="checkbox"/> Don't know  |
|  | <input type="checkbox"/> Decline to answer   |

**17. If you visited an Urgent Care Center or Emergency Department in the past 12 months instead of going to your medical provider, what was your reason?**

*Please choose all that apply.*

- Didn't visit Urgent Care or Emergency Dept in last 12 months
- Needed care after regular office hours
- Convenient locations and/or hours
- Wanted to be seen right away/No wait time for appointments
- I do not have a medical provider
- Couldn't get a timely appointment with my medical provider
- I do not have a mental health provider
- Couldn't get a timely appointment with my mental health provider
- I do not have health insurance
- More affordable/No cost
- Was traveling/Away from home
- Other (*please specify*): \_\_\_\_\_
- Don't know
- Decline to answer

**18. I can use applications on my computer, cell phone, or another electronic device on my own without asking for help from someone else.**

*Please select one.*

- Agree
- Disagree
- Don't have/use electronic devices
- Don't know
- Decline to answer

**19. I am open to participating in "telehealth," i.e., having my health assessed and managed virtually through a phone and/or electronic device.**

*Please select one.*

- Agree
- Disagree
- Don't have/use electronic devices
- Don't know
- Decline to answer

**20. Did your child/ren (under 18 years old) have a yearly wellness visit with a medical provider in the past 12 months?**

*Please select one.*

- Yes
- No
- At least one child, but not all
- I don't have any children under 18 years old
- Don't know
- Decline to answer

**21. Did your child/ren (under 18 years old) receive a regular dental checkup at least once in the past 12 months?**

*Please select one.*

- Yes
- No
- At least one child, but not all
- I don't have any children under 18 years old
- Don't know
- Decline to answer

**22. In the past 12 months, did your child/ren (under 18 years old) need help from a doctor, therapist, counselor, or social worker for emotional or mental health problems or challenges such as feeling sad, depressed, angry or anxious?**

*Please select one.*

- Yes
- No
- At least one child, but not all
- I don't have any children under 18 years old
- Don't know
- Decline to answer

**23. What ideas or suggestions do you have to improve health in your community?**

*Please write your answer.*

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**Thank you for completing the survey!**

## APPENDIX 7 | PRIMARY DATA SUMMARY

Primary data findings are summarized in full by the table below.

	Priority Area	Community	Key Leaders	Focus Groups*
★	Access to Care	✓	✓	✓
★	Behavioral Health/Mental Health	✓	✓	✓
★	Food Insecurity	✓	✓	✓
	Housing and Homelessness	✓	✓	✓
★	Transportation and Transit	✓	✓	✓
★	Substance Use	✓	✓	
★	Chronic Diseases	✓	✓	
	Education			✓
★	Income and Employment	✓	✓	
	Health Equity		✓	
★	Overweight/Obesity	✓	✓	
	Mistrust in Healthcare System	✓	✓	
★	Violence and Safety		✓	✓

★ Top priority area from secondary data

\*Focus group results are limited to the highest priority needs.